1998 MOTOR MAGAZINE INDEX

HOW TO USE THIS INDEX

General subjects are listed first, with a month and page reference (if applicable), followed by related subjects and their references. The reference gives the month of the magazine in which a topic appeared, followed by a colon and the page or pages. For example, under the general subject of "Environmental Protection Agency (EPA)," the subtopic "environmental violation fines" was covered in the January issue on page 28, and is indexed as "Jan:28."

Regarding numbers (for example, years, model numbers, engine sizes, etc.), they are arranged in increasing order, without regard to alphabetization. Thus, years are listed with the earliest year first. Likewise, "BMW 3-series" would appear before "BMW 5-series," and "Audi 200" would be listed before "Audi 5000."

A

2 Cents Worth
appreciation for MOTOR Magazine, Jan:82
apprenticeship programs, Jan:82
ASE training standards, Oct:B48
auto inspections, Jul:100
bleeding problems solved, Sep:102
city bus safety, Jul:100
correction to April issue, *A/C Retrofit Revisited*, Jun:80
correction to August **Service Slants**, vehicles with hydraulic brakes, Sep:102
correction to June cover photo caption, Aug:82
correction to scheduled maintenance chart for brakes, May:102
correction to scheduled maintenance chart for cooling systems, Dec:82
homework for technicians, Jun:80
low pay for beginning techs, Feb:104
low pay for technicians, Mar:130
master technician debate, Aug:82, Dec:82
Moog Automotive, correction to 800 number in *Source Guide*, Dec:82
OBD II question, Sep:102
praise for Bob Cerullo, Sep:102
pride, not arrogance, Oct:B48
safety inspections, Aug:82
school-to-work programs, Feb:104
"service" vs. "fix," May:102
tech shortage, Mar:130
thanks for help with Honda problem, May:102
thanks to Mark Warren, Jun:80
turn signal mystery, Aug:82
Wagner Brake Products, correction to 800 number in *Source Guide*, Dec:82
what training is available, Mar:130
2.5TL (Acura)
miscellaneous troubleshooting tips (1995-96), Dec:61, 63
stuck ignition key (1995-96), Jul:76
3-series (BMW)
2.5-liter, A/C belt tensioner noise (1992 on), Apr:65
1999 tech report, Dec:31-32
no start (1990 on), Dec:43-44
3.2TL (Acura)
miscellaneous troubleshooting tips (1995-96), Dec:61, 63
stuck ignition key (1995-96), Jul:76
4WD pickup (Nissan), front end service upgrade (1989-90), Mar:109
5-series (BMW)
2.5-liter, A/C belt tensioner noise (1992 on), Apr:65
no start (1990 on), Dec:43-44
9-3 (Saab), U.S. passenger-side split wide-angle outside mirror, Sep:62-63
9-5 (Saab)
1999 tech report, Dec:32
unveiled, Jul:66
U.S. passenger-side split wide-angle outside mirror, Sep:62-63
80 (Audi), leaking brake master cylinder (1988-92), Jul:71
90 (Audi), leaking brake master cylinder (1988-92), Jul:71
98 (Oldsmobile), 3.8-liter, intermittent stalling (1986), Mar:10-12
100 (Audi)
inaccurate fuel gauge, bad ground (1993-95), May:84
leaking brake master cylinder (1988-92), Jul:71
R-134a system capacity (1992 on), Jun:59-60
240 (Volvo), dropping idle when A/C comes on (1991-94), Feb:86
240 DL/GL/GLT/GT (Volvo), 2.3-liter, shift lever rattle, Jan:67
240SX (Nissan), clutch bleeding (1991-93), Dec:60
300ZX (Nissan)
heater gurgle (1989), Jan:63
pinging in 5th gear (1990-92), Aug:66
318i (BMW)
delayed gear engagement, Oct:24
front-end play (before 1993), May:85
transmission DTC 40 (before 1993), Mar:104
318iS (BMW), front-end play (before 1993), May:85
318ti (BMW), noisy A/C (1996), Apr:60
323 (Mazda), erratic overdrive operation (1989), Mar:109
325i (BMW)
delayed gear engagement, Oct:24
front-end play (before 1993), May:85
transmission DTC 40 (before 1993), Mar:104
325iS (BMW), front-end play (before 1993), May:85
328i (BMW)
2.8-liter, coolant leak from throttle bore (1997), Dec:63
MIL on with DTCs set (1996 on), Nov:83
525i (BMW)
delayed gear engagement, Oct:24
transmission DTC 40 (before 1993), Mar:104
528i (BMW), MIL on with DTCs set (1996 on), Nov:83
530i (BMW)
transmission leaks, Feb:80
updated engine management software (up to 1995), Sep:83-84
540i (BMW)
transmission DTC 40 (before 1993), Mar:104
transmission leaks, Feb:80
updated engine management software (up to 1995), Sep:83-84
626 (Mazda)
clutch hosing oil leak (1994), Sep:16-17
front strut squeak (1993-96), Jul:76
700 (Volvo), distributor oil leak, Mar:104
740i (BMW)
transmission leaks, Feb:80
updated engine management software (up to 1995), Sep:83-84
740iL (BMW), updated engine management software (up to 1995), Sep:83-84
750iL (BMW), intermittent stall (1989), Jan:63
840Ci (BMW), updated engine management software (up to 1995), Sep:83-84
850 (Volvo)
belt noise (1992-93), Apr:65
can't get out of "Park" (1994-96), Sep:82-83
intermittent jerking, flashing MIL (1994-96), Jun:59
power steering chatter (1995), Oct:26
revised torque specs (1992 on), Jul:71
900 (Saab)
driveline vibration (1993-94), Feb:86
excessive oil consumption (1989), Feb:84
fan runs continuously, dead battery (1989-93), Nov:81
front end vibration (1994), Sep:82
hard cold starting (1989), Jan:66
too many dead batteries (1994-95), Aug:62, 64
weird electrical gremlins (1989-93), Oct:24
911 (Porsche), 1999 tech report, Dec:32
911 Carrera (Porsche)
10th North American International Auto Show (NAIAS), Jan:74-75
fuel odor (all years), Aug:62
smoke on start up (1995), Feb:80
911 Carrera 2 (Porsche)
knocking noise in steering (1992-93), Jan:64
power steering noises (1992-94), Oct:40
refrigerant loss (1989-94), Oct:24
911 Carrera 4 (Porsche)
knocking noise in steering (1992-93), Jan:64
power steering noises (1992-94), Oct:40
refrigerant loss (1989-94), Oct:24
911 Carrera Turbo (Porsche)
fuel odor (1991 on), Aug:62
knocking noise in steering (1992-93), Jan:64
911 Turbo (Porsche)
power steering noises (1992-94), Oct:40
refrigerant loss (1991-92), Oct:24
smoke on start up (1995), Feb:80
940 (Volvo), poor A/C performance (1992-95), Nov:80
944 S2 (Porsche)
funny camshaft noise (1989-91), Jan:67
lumpy idle, hesitation (1989-91), Mar:104
960 (Volvo)

1998 Motor Magazine Index

Blazer (Chevrolet), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
BMW
See also specific models
donation to Komen Breast Cancer Foundation, Jul:86
idle surge (mid 80s), Dec:44
poor shift quality, Jun:62
replacing shock absorbers, Jul:73
self-activating flashers (1993), Jan:66
serious internal engine degradation (1990), Jun:60
BMW of North America, training partnership with Universal Technical Institute, Inc., Jul:64
Bonneville (Pontiac)
A/C system thump (1995-97), Dec:64
ABS and Traction Control warning lights stay on (1993/1995), Aug:10, 11-12
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Bosch. *See* Robert Bosch
Brakes
correction to *Vehicle Manufacturers' Recommended Maintenance Intervals*, May:102
Kelsey-Hayes 4WAL ABS system, Jun:30-34
OE scheduled maintenance, Mar:84-86
solutions for bleeding, Jun:38-42, 44
Vehicle Manufacturers' Recommended Maintenance Intervals, wall chart, Mar:87-94
Bravada (Oldsmobile), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-94, 96), Feb:84
Breeze (Plymouth), 2.4-liter, timing belt service (1996), Oct:22-23
Bronco (Ford)
electrical glitches (1994-96), Dec:66
fuel pump electrical noise (1989-96), Nov:78-79
updated trans center support (1989-1994), Jun:60
worn out belt tensioner (1993-95), Nov:83
Bronco II (Ford), fuel pump electrical noise (1989-90), Nov:78-79
Business Sense
advertising and marketing, Jun:47-50
creating a business plan, Aug:49-52
Employee Relations, Dec:47-50
establishing and reaching business goals, Aug:49-52
getting shop policies in writing, Feb:65-68
Hazardous Materials and Shop Safety, Oct:43-46
BWC. *See* Beck Arnley Worldparts Corp (BWC)
BWD Automotive
1998 *Borg-Warner Carburetor Tune-Up Kits & Carburetor Floats* catalog, Apr:66
Borg-Warner brand Pro Cleen System, Oct:B20
Niehoff brand fuel pump catalog, Feb:92
technical assistance added to web site, Jun:66

C

C280 (Mercedes Benz), high idle (1995 and before), Jun:62
C/K pickup (Chevrolet)
4.3/5.0/5.7-liter engine noise (1996-97), Sep:84
improper EGR valve installation (1993-96), Feb:84
C/K pickup (GMC), 4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
C/K sport/ute (Chevrolet), 4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
C/K sport/ute (GMC), 4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
C/K truck (Chevrolet), 7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
C/K truck (GMC), 7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
CAAT. *See* Council of Advanced Automotive Trainers (CAAT)
Cabrio (Volkswagen)
2.0-liter, hesitation, loss of power (1994), Feb:84-85
inadequate A/C (1993 on), Jul:71
California Air Resources Board (CARB), On-Board Diagnostics (OBD) lawsuit, Mar:99
California Consumer Choice, changing California Air Resources Board (CARB) regulations, Apr:2
California Integrated Waste Management Board, web site address, Nov:86
Camaro (Chevrolet)
3.4-liter, start and stall (1994-95), Jun:58
5.7-liter
chuggle or surge (1993), Mar:104
power steering goes away (1993), Aug:60, 62
poor A/C performance (1994-95), May:83
Camry (Toyota)
3.0-liter, engine knock with A/C on (1989-91), Jan:65
new trunk torsion rods (1992-96), Apr:64
Canadian Motive Power Instructors Association, new association formed, Mar:116
Capri (Mercury), fuel pump electrical noise (1986), Nov:78-79
Caprice (Chevrolet), 4.3/5.7-liter, engine noise (1994-96), Sep:84
Car Care Council (CCC)
Certified Inspection (CI) program, Mar:99
women and car care survey results, Jul:65-66
Car Care Parts Mfg.
leak detection kit, Aug:68
tips for dealing with blown gaskets and fried clutches on common A/C compressors, Apr:63
Car-O-Liner Company, Truck Clamping and Support System, Nov:61
Caravan (Dodge)
2.4-liter, timing belt service (1996), Oct:22-23
cruise control characteristics (1989 on), Nov:81-82
intermittent sliding door power locks (1996), Jan:64
radar-jamming driveability problems (1996), Feb:84
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
CARB. *See* California Air Resources Board (CARB)
Cardone Industries, Inc.
1998 catalog supplement, Dec:68
Ride Saver Plus remanufactured gas-charged struts, Jul:57
CarGo Chemical, QuikSteel epoxy, Jan:71
CarQuip. *See* Garage Equipment Supply
CARS
Shop Management Tools for Success, Feb:97, Apr:74, May:95, Jun:73, Jul:93, Aug:75, Oct:B23, Dec:75
Castrol, official supplier to Audi and Volkswagen, May:88
Catera (Cadillac), 3.0-liter, 1999 tech preview, Sep:52-53
Cavalier (Chevrolet)
2.2-liter, stalling, rough running, no-starts code 42 (1990-91), Apr:58
growling/grinding noise in "Park" on incline (1992-95), Dec:66
loud knocking on rough roads (1995-96), Jul:72
CCAR. *See* Coordinating Committee for Automotive Repair (CCAR)
CCC. *See* Car Care Council
Central Florida Auto Dealers Association, outstanding contribution to vocational education award, Jul:86
Central Lighting, Bounce Lite, Feb:90
Century (Buick)
2.5-liter, intermittent die-out (1989), Sep:14, 16-17
cold stall, hesitation, rough idle (1994-95), Mar:105
growling/grinding noise in "Park" on incline (1992-95), Dec:66
hard start when cold, loss of power and bucking, Feb:10, 12-13
Century Mfg. Company, Viper A/F recycler, Sep:78
Champion Laboratories, web site address, Aug:67
Champion Pneumatic, Advantage Series air compressors, Apr:74, Jun:65
ChekChart, new multimedia packages for ASE test preparation, Jan:68
Cherokee (Jeep)
grinding/scraping noise (1993-97), Jul:71
normal startup noises (1996), Feb:85
software flash updates (1996), Dec:64
Chicago Pneumatic
CP830 high-torque air ratchet, Jan:72
CP-749 1/2" impact wrench, Jun:68
product launch, Nov:86
Chief Automotive Systems
Genesis 2 Gold computerized measuring system, Nov:61
partnership with Hunter Engineering Company, Sep:88
Christie, PDQ 30-minute charger, Nov:61
Chrysler Corp.
See also specific models
2.2/2.5-liter, unevenly expanding engine casings, Aug:34
3.3-liter, noise on right side, Mar:10-12
catalyst monitoring system, Jul:29-30
evaporative monitor, Jul:31
Low Emission Vehicle (LEV), May:70
Mopar OE quality brake components, Mar:96
oxygen sensor heater, Jul:30
Target Training Systems, CD-ROM training system, Dec:71
Church & Dwight, partnership with Safety Kleen, Jun:65
Ciera (Oldsmobile), growling/grinding noise in "Park" on incline (1992-95), Dec:66
Cirrus (Dodge)
2.4-liter, timing belt service (1996), Oct:22-23
cruise control characteristics (1993 on), Nov:81-82
gauges go to zero (1995), Jul:70-71
inconsistent wiper delay, no right turn signal cancel (1995), Dec:61
intermittent electrical gremlins (1995), Aug:65
radio/clock display goes blank (1995), Sep:82
Civic (Honda)
pinholes in A/C compressor (1994-97), Apr:60
testing tips for the dual-point TBI system (1988-91), Dec:20, 23
Classic Tool Design
A/C system charging cylinder, May:90
Ford spring lock honing kit, Mar:123
Clayton Associates, CareFree Parts Washer, Jan:70
Clean Burn, Inc.
used oil fired heating system, Jan:75, Aug:70, Oct:B20
used oil furnaces new burner, Jan:49
Cliplite Manufacturing, *A Breath of Fresh Air* UV leak detection catalog, Jan:69
Computers
See also Internet; Software; World Wide Web (WWW)
Automotive Electronics, remanufactured computers for Asian and European vehicles, Feb:14, 16
Enterprise Alliance, PASSPORT Technical Standards for computer interoperability, Jan:60
Magellan Systems Corp., Pathfinder vehicle navigation system, Mar:98-99
Micro-Tech, remanufactured computers for Asian and European vehicles, Feb:14, 16
Mopar Performance Parts, remanufactured electronic engine controllers, Dec:71
MOTOR/ALLDATA computerizing the shop, Mar:113-114
system assessment, Jan:54-56
OBD II
PC-based scanners, Oct:16, 19
reprogramming flash PROMs, Aug:4, 6
Target Training Systems
CD-ROM training system for Chrysler, Dec:71
CD-ROM training system for Ford, Dec:71
Y2K and automotive ECUs, Apr:4, 6
Concorde (Chrysler)
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1993 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
Coni-Seal
master brake cylinders, Jun:68, Oct:B20
Contact East
1998 *Update* catalog, Jun:66
automotive tool catalog, Dec:68
Continental House, power steering hose repair kit, Sep:90
Continental (Lincoln)
4.6-liter, intermittent no-start (1995-97), Aug:62
broken trunk pull-down (1988-94), Oct:23
clicking noise in reverse (1995-96), Apr:60
contaminated fuel tank (1993-94), May:84
fuel pump electrical noise (1988-94), Nov:78-79
Contour (Ford)
2.5-liter
engine noise on startup (1995), Jan:62-63
no power on takeoff (1995), Jun:62
water pump squeal (1995-96), Sep:80, 82
lots of codes, no driveability problem (1996), Jul:71
Cooling Systems
correction to *Vehicle Manufacturers' Recommended Maintenance Intervals*, Dec:82
OE Scheduled Maintenance, Sep:65, 67-68
Vehicle Manufacturers' Recommended Maintenance Intervals, wall chart, Sep:69-76
Coordinating Committee for Automotive Repair (CCAR)
*Green*Link
safety and environmental contact information, Jan:34
web site address, Jan:68, Dec:68
Cordia (Mitsubishi), transaxle service (1989-90), Mar:109
Corrado (Volkswagen)
inadequate A/C (1993 on), Jul:71
intermittent no-starts (1990-95), Sep:83
weird engine noise when warm (1990-93), Jan:63-63
Corrosion Consultants, Exact-Dose A/C dye injector, Apr:67
Corsica (Chevrolet)
2.2-liter, stalling, rough running, no-starts code 42 (1990-91), Apr:58
3.1-liter, long crank times and rough idle (1994), Dec:10, 12
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Corvette (Chevrolet), new 5.7-liter V8 small-block engine, Aug:30
Cougar (Mercury)
2.3-liter, warbling noise from engine compartment (1985), Jan:66
10th North American International Auto Show (NAIAS), Jan:74
fuel pump electrical noise (1985-96), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
power steering leak (1996), Aug:64
Council of Advanced Automotive Trainers (CAAT)
Core Services Task Assessment CDT-1, May:67
Driveability and Emissions Assessment CDT-2, May:69-70
CRC Industries, Brake Caliper Synthetic Grease, Mar:95
Crown Victoria (Ford)
4.6-liter
cold-start engine noise (1993-96),

Oct:40
manufacturing differences (1996 and on), May:81-82
5.0-liter, excess blowby (1984), Jun:6-7
fuel pump electrical noise (1986-94), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
CRT Auto Electronics, Current Probe, Sep:91
Cutlass (Oldsmobile)
Cierra, cold stall, hesitation, rough idle (1994-95), Mar:105
composite leaf spring helpers (1988-93), Jul:70
growling/grinding noise in "Park" on incline (1992-95), Dec:66
hard start, intermittent stalling, Mar:14-17
Cutlass Supreme (Oldsmobile)
3.4-liter, MIL on with DTC 1403 (1994-95), Jun:62
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Cyclo Industries
Antiseize compound, Dec:70
Break Away rust penentrant/protectant, Feb:90
Industrial Strength Cream, Oct:55
Orange Citrus Lotion, Oct:55

D

Dakota (Dodge)
normal startup noises (1996), Feb:85
software flash updates (1996), Dec:64
transmission temperature sensor incompatability (1995), Nov:79
wheel runout (1994-95), Oct:25
Dakota Tools, J-Wrench Line, 1998 Top 20 Tools, Sep:36, 38
Dana Corp.
creates Automotive Aftermarket Group, Sep:62
Machinist of the Year award given, Nov:86
Perfect Circle Sealed Power Division, supplier of the year award, Jul:86
piston rings, Oct:B20
Solutions quarterly newsletter, Sep:88
Technical Resource Park (TRP), Jan:58-59
top ten technologically innovative companies, Aug:67
Darex, Drill Doctor, Jan:71
Davis Institute of Transportation Studies, CarLink smart card technology, Apr:53-54
Dayco, automatic belt tensioners, Sep:77
Daytona (Dodge), cruise control characteristics (1989-93), Nov:81-82
Defender (Land Rover)
defective timing gear (1995-96), Dec:64
no start in cold weather (1993-95), Jan:65
spark plug update (1987 on), Dec:60
Del Sol (Honda), pinholes in A/C compressor (1994-95), Apr:60
Delco Electronics, Network Vehicle, Mobile Media Link high-speed fiber optics data bus and displays, Jan:61
DeltaTRAK Scientific, infrared thermometer, Feb:94, Jun:68, Aug:75, Sep:92
Department of Transportation (DOT)
air bag switch ruling, Mar:6
final ruling on air bags, Jan:59-60
Detroit Gasket, Expand-Tech exhaust gaskets, Jan:70
DeVille (Cadillac)
new design front-wheel-drive hub (1992-95), Sep:80
thermal imaging available, Nov:74-75
DeVille Concours (Cadillac)
4.6-liter, long crank times following cold soak (1994-95), Jan:63
new design front-wheel-drive hub (1992-95), Sep:80
Diagnostics
engine control problems, Feb:32, 49
European Diagnostics Dilemmas, Dec:42-46
Evolving Engine Technology, Aug:28-31, 34, 39
fixing bad grounds, Feb:62
General Motors, Service Technology Group (STG) Smart Mentor, Jun:51-52
ghost trouble codes, Feb:30-32, 49-50, 52
Hall-effect position sensor problems, Feb:49-50
LuK Clutch System Diagnostics Guide, Mar:118
misleading codes, Feb:31-32
misleading oxygen sensor codes, Feb:52
negative voltage and spikes, Feb:56, 61
OBD II, traditional scanner platforms available for Asian and European vehicles, Sep:26, 28
OBD II Upclose, in-depth look at, Jul:28-32, 34
phony EGR codes, Feb:50, 52
Scope Dope, Nov:26-29, 31-33
transient current devices and grounds, Feb:55
using lab scopes and current probes together, Mar:22-29
voltage drops and bad grounds, Feb:54-55, 61-62
Diamante (Mitsubishi), MIL on with DTDC 31 stored (1993), Oct:40, 42
Digital multimeter (DMM), characteristics of, Jan:24-25
Digital storage oscilloscope (DSO) characteristics of, Jan:26-27
Scope Dope, Nov:26-29, 31-33
Discovery (Land Rover)
1999 tech report, Dec:31
defective timing gear (1995-96), Dec:64
inoperative tach/hard starting (1995 and before), Oct:26
no start in cold weather (1993-95), Jan:65
spark plug update (1987 on), Dec:60
transfer case whine (1994-95), Apr:61
DMM. *See* Digital multimeter (DMM)
DOT. *See* Department of Transportation (DOT)
Dozier Equipment, material storage and handling buyers guide, Apr:66
Driveability Clinic, measuring fuel delivery with pulse width, Feb:18, 19-20
Driveability Corner
3000GT (Mitsubishi), doesn't accelerate quickly enough (1992), Aug:18, 20, 24, 27
OBD II
data acquisition speed, Jun:22-23
enhanced vs. generic data, Jun:23-24
generic parameters, Oct:20-21
protocols, Jun:25
signature analysis of RPM and VSS traces, Aug:18, 20, 24, 27
speed-density (MAP-sensor-only) fuel control system, Apr:18, 20-21
Trooper (Isuzu), intermittent hesitation (1996), Dec:24-25
Drivelines
OE Scheduled Maintenance, Nov:62-64
Vehicle Manufacturers' Recommended Maintenance Intervals, wall chart, Nov:65-72
DSO. *See* Digital storage oscilliscope (DSO)
DSTC. *See* Dynamic Stability and Traction Control (DSTC)
DuPont, top-ranked supplier award, Jul:86
Durango (Dodge), tech report ('98), Feb:25
Dynagear
1998-99 oil pump catalog, Jun:66
Timing Components catalog, Aug:67
Dynamic Stability and Traction Control (DSTC), installed on Volvo S80, Apr:54
Dynasty (Dodge), cruise control characteristics (1989-93), Nov:81-82

E

E320 (Mercedes Benz)
high idle (1995 and before), Jun:62
high idle speed after cold start (up to 1995), Jul:73-74
Eagle Equipment
new plant opens, Apr:74
premier series two post lifts, Oct:B20
two post lifts, Dec:71
EASE Simulation
OBD II Windows-based scan tool, Jun:67, Aug:70, Nov:93
1998 Top 20 Tools, Sep:47-48
OBD II Windows-based software, Mar:111
Pre-OBD II and OBD II Smart Data loggers, Nov:61
QuikCode Windows-based scan tool, Sep:26, Oct:16, 19
Scan Tools Shootout, Nov:75-77
Eclipse (Mitsubishi), 1.8-liter, rough idle, stalling (1990-94), Jan:65
Econoline (Ford)
5.8-liter, stall during extended idle (1996), Jul:70
7.3-liter, hesitation, rough idle, poor performance (1995), Feb:79-80
fuel pump electrical noise (1989-96), Nov:78-79
updated trans center support (1989-1994), Jun:60
worn out belt tensioner (1993-95), Nov:83
Edelmanns, 1999 *Steering Systems Products* catalog, Apr:66
Edge Diagnostic Systems, PACDock, 1998 Top 20 Tools, Sep:38
Editor's Report
Aftermarket Joint Economic & Issue Summary Statement, aftermarket competition, May:2
Are Technicians Ready for OBD II?, Jun:2
Automobile Association of America (AAA), air bag switch installation survey, Mar:6
California Consumer Choice (CCC), changing California Air Resources Board (CARB) regulations, Apr:2
California On-Board Diagnostic (OBD) regulations, Apr:2
Department of Transportation (DOT), air bag switch ruling, Mar:6
Ford Motor Company, self-assessment of the organization, May:2
heeding the changes in the automotive service industry, Aug:2
importance of preventive maintenance, Feb:2
Insurance Institute for Highway Safety (IIHS), air bag survey, Mar:6
International Automotive Technicians Network (iATN), air bag switch installation survey, Mar:6
MOTOR Magazine
95 years ago, Jul:2
1998 Source Guide, Oct:4
National Center for Vehicle Emissions Control and Safety (NCVECS), on-board diagnostics study, Jan:2
OBD II and the Automotive Technician, Jun:2
Service Technicians Society (STS), Scan Tool Shootout, Sep:2
shopping for a new car, Nov:2
Top Ten New Year's wish list, Dec:4
EGR System
Smithtronics ST 5300 tester, May:36-37, 39
The EGR Chronicles, May:30-32, 36-37, 39
Eighty Eight (Oldsmobile)
A/C system thump (1995-97), Dec:64
ABS/traction warning light on (1995), Jun:60-62
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
EIS Brake Parts, X-tender QMX disc brake pads, Mar:95
Elantra (Hyundai)
new engine specs (1996-97), Oct:40
tapping noise at passenger firewall (1996), Jul:72
Eldorado (Cadillac)
4.6-liter, long crank times following cold soak (1993-95), Jan:63
ignition key binds (1992-95), May:82
new design front-wheel-drive hub (1992-95), Sep:80
Emissions
5-Gas Analysis, May:42-43, 46, 48-50
carbon dioxide (CO2), May:46
carbon monoxide (CO), May:42-43
Emissions Testing, State by State chart, Nov:38-39
Evolving Engine Technology, Aug:31, 34, 39
glossary of special terms, Nov:41
hydrocarbons (HC), May:43
I/M Update, Nov:35-36, 38-39, 41
Lumina (Chevrolet), convertor doesn't light off (1997), May:48-50
National Center for Vehicle Emissions Control and Safety (NCVECS), on-board diagnostics study, Jan:2
nitrogen oxide (NOx), May:46, 48-49
oxygen (O2), May:43, 46
testing convertor efficiency, May:48-50
The EGR Chronicles, May:30-32, 36-37, 39
Engine Performance, May:55, 57-58
Vehicle Manufacturers' Recommended Maintenance Intervals, wall chart, May:58-66
Enginewity International, multifunction flusher, Sep:90
Enterprise Alliance, PASSPORT Technical Standards for computer interoperability, Jan:60
Environmental procedures
compliance with new underground storage tank regulations (UST), Jan:34
dealing with contaminated shop rags, Jan:34
handling spent coolant, Jan:33
handling used oil, Jan:33
Hazardous Materials and Shop Safety, Oct:43-46
oil, filter and chassis lubrication, Jan:39-40
preventing stormwater runoff, Jan:33-34
recovering and recycling A/C refrigerant, Jan:34
Environmental Protection Agency (EPA)
allows recycling of refrigerant blends, Jul:64
environmental violation fines, Jan:28
final ruling on vehicle inspection and maintenance, Jul:69
national emissions standard, Jun:53
new OBD regulation, Apr:55-56
new underground storage tank (UST) regulations, Jan:34
On-Board Diagnostics (OBD) lawsuit, Mar:99
safety and environmental contact information, Jan:34
violation penalties reduced, May:78
Environmental Systems Products (ESP), SystemOne emission inspection system, Oct:B21
EPA. *See* Environmental Protection Agency (EPA)
Equipment & Tool Institute (ETI)
50th anniversary annual meeting, Jan:51-52
Planning For Success, Nov:49-61
ES 300 (Lexus), hard restarting (1993 and before), Oct:26
Escort (Ford)
brake noise under 35 mph (1991-96), Feb:86
fuel pump electrical noise (1987-96), Nov:78-79
ESP. *See* Environmental Systems Products (ESP)
ESX2 (Chrysler), 10th North American International Auto Show (NAIAS), Jan:71-72
ETI. *See* Equipment & Tool Institute (ETI)
EV1 (General Motors), 10th North American International Auto Show (NAIAS), Jan:71
Expedition (Ford), 1999 tech preview, Sep:56-57, 59
Explorer (Ford)
4.0-liter, recall for fire hazard during jump-start, Jul:12
electrical glitches (1993-96), Dec:66

1998 Motor Magazine Index

fuel pump electrical noise (1991-96), Nov:78-79
grabbing brakes (1991-94), Oct:25-26
lots of codes, no driveability problem (1996), Jul:71
vibration and shake (1991-94), Jul:73
Express (Chevrolet), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Eye on Electronics
cleaner burning, more efficient European fuel systems, May:16, 19-20
Cutlass (Oldsmobile), hard start, intermittent stalling, Mar:14-17
eddy current sensors, Jan:18, 19-20
Explorer (Ford), 4.0-liter, recall for fire hazard during jump-start (1997-98), Jul:12
jump starting, dangers of/procedures for, Jul:12, 15, 18-19
magnetostriction sensors, Jan:18, 19-20
Maxima (Nissan), procedures for jump-starting (1989-92), Jul:12
Mercedes, Vehicle Dynamics Control (VDC), Jan:18, 20
Micro500, charging system performance tester, Nov:21
Mountaineer (Mercury), 4.0-liter, recall for fire hazard during jump-start, Jul:12
multiplex systems, pitfalls of servicing, Sep:22, 24-25
piezoelectric crystals, Jan:20
SmarTech TA100, engine rpm and ignition firing voltage tester, Nov:16, 21

F

F-150 (Ford)
fuel pump electrical noise (1989-96), Nov:78-79
lots of codes, no driveability problem (1997), Jul:71
updated trans center support (1989-1994), Jun:60
F-250 (Ford)
7.3-liter, hesitation, rough idle, poor performance (1994-95), Feb:79-80
acceleration vibration (1988-94), Dec:61
F-350 (Ford)
7.3-liter, hesitation, rough idle, poor performance (1994-95), Feb:79-80
fuel pump electrical noise (1989-96), Nov:78-79
updated trans center support (1989-94), Jun:60
F-series truck (Ford), worn out belt tensioner (1993-95), Nov:83
F-Super Duty (Ford)
7.3-liter, hesitation, rough idle, poor performance (1994-95), Feb:79-80
fuel pump electrical noise (1989-96), Nov:78-79
updated trans center support (1989-1994), Jun:60
Federal-Mogul Corp.
Carter AFB Fine Tuning Manual, May:88
differential overhaul kit, Nov:85
Engine Kits Cash Giveaway winners announced, Sep:88
engine repair turnaround, May:68
low-friction tie rods, Jul:57
NASCAR Winston Cup tech line, Aug:56
Performance Parts Supplement, Jun:66
Sealed Power Platinum Cash Giveaway Promotion winner, Nov:86
Sealed Power Platinum engine kits, May:67
Sealed Power Platinum engine repair marketing program expanded, Apr:66
Steering and Suspension Parts from TRW catalog, Jul:86
web site address, Jan:68
Fel-Pro
Engine$aver Abrasive Gasket Removal Kit, Mar:111
expanded Engine$aver hardware line, Jul:86
Gasket Installation Tips booklet, May:88
High Performance Engine Rebuilding and Blueprinting School, Apr:66
PermaDry Plus valve cover gasket, Aug:68-69
Torque Tables booklet, Feb:90
web site address, Jan:69
Ferret Instruments, Model 950 Lab Scope KV Adapter, 1998 Top 20 Tools, Sep:31-32
Firebird (Pontiac)
3.4-liter, start and stall (1994-95), Jun:58
5.7-liter
chuggle or surge (1993), Mar:104
power steering goes away (1993), Aug:60, 62
poor A/C performance (1994-95), May:83
Fleetwood (Cadillac)
4.3/5.7-liter, engine noise (1994-96), Sep:84
new design front-wheel-drive hub (1992-95), Sep:80
Flex-a-lite
engine cooling fan catalog, Sep:88
web site address, Sep:88
Fluke Corp.
98 Series II Auto Scopemeter, Feb:97, Apr:74, Jul:88, Sep:92
new catalog, Jan:69
new training package for Hall's Multimedia Series in Automotive Technology, May:88
Focus (Ford), new diesel, Aug:30-31
Ford ASSET, Student Auto Skills Challenge, Jun:54
Ford Motor Company
See also specific models
3.8-liter, mild squeak, chirp or knock in engine, Feb:80, 82
5.0 liter, clogged oil pickup tube screen (mid-to-late 1980s), Jan:7
7.3-liter, Baldwin diesel air filters, May:67
A/C dies a black death, Sep:84, 86
A/C service tips (1996 and on), Feb:83
catalyst monitoring system, Jul:30
closed-loop recycled batteries, Jan:61
driveability techs wanted, Nov:61
evaporative monitor, Jul:31
hard start/long crank (1995-96), Dec:64
oxygen sensor heater, Jul:30
recycled material tires, Mar:100-101
self-assessment of the organization, May:2
sludge-tolerant throttle bodies, when bore cleaning is unavoidable, Sep:4, 7, 10
Target Training Systems, CD-ROM training system, Dec:71
teams with NASA's Jet Propulsion Laboratory (JPL) to bring artificial intelligence to trucks and cars, Dec:52-53
torque converter shudder, correction to April column, May:85
Worldwide Diagnostic System (WDS), Apr:54-55
Foreign Service
Accord (Honda), 2.2-liter, replacing the cam belt (1990 on), Mar:18-19
Acura, shorted sensor heaters, Jun:19
Automotive Electronics, remanufactured computers for Asian and European vehicles, Feb:14, 16
carburetor icing on Asian vehicles, May:24, 27
Civic (Honda), testing tips for the dual-point TBI system (1988-91), Dec:20, 23
corrections to past articles, Jun:19
heated oxygen sensor replacement, Jun:14, 19
Honda, shorted sensor heaters, Jun:19
Jetta (Volkswagen), replacing the starter, Jul:22, 25
Micro-Tech, remanufactured computers for Asian and European vehicles, Feb:14, 16
Nissan
3.0-liter, engine leaks (1984 to mid 90s), Apr:14, 16
3.0-liter, timing belt replacement (1984 to mid 90s), Apr:14, 16
OBD II
diagnostic testers for Asian and European vehicles, Aug:14, 17
PC-based scanners, Oct:16, 19
traditional scanner platforms available for Asian and European vehicles, Sep:26, 28
Toyota
long-tern fuel trim, Jan:17, 19
measuring Vf voltage, Jan:19
no start and/or no trouble codes, Jan:14
using rotary grinders on Asian carburetors, distributors and injection systems, Nov:22, 25
Fram, Tough Guard oil filters, Jan:49
Frontier (Nissan), tech report (1998), Feb:28
Fuel systems, *Point of no Return*, service tips for returnless systems, Jul:36-38, 40, 42, 44-45
FutureCar Challenge, Partnership for a New Generation of Vehicles (PNGV), Aug:55-56
F.Y.i
ACEI, acquires front wheel drive axle division from Cooper Industries, Jul:86
Advantage/Globe Lift Systems, in-ground retrofit lift accepted by General Motors Dealer Equipment (GMDE) Program, May:88
AE Clevite, CD-ROM version of Clevite Electronic Engine Kit (CEEK), May:88
Aimco Products, master brake catalog, Jan:69, Dec:68
Airtex Products, web site address, Nov:86
All Pro/Bumper To Bumper involvement with Muscular Dystrophy Association, Jan:68
two new safety training programs, Apr:66
ALLDATA, repair and management information web site address, Jan:68
AlliedSignal, Inc.
Buy 3, Get 1 Free promotion, Jun:66
Make It a Blockbuster Night promotion, Jun:66
web site address, Feb:92
west coast distribution center opened, Nov:86
ALMCO, aqueous parts washer and dryer brochure, Feb:92-93
American Management Institute (AMI), education web site address, Jan:68
American Vocational Association/Automobile Manufacturers Association, Industry Planning Council Award of Excellence given, Jan:68
AMMCO, Factory Cash Back rebate program, Nov:86
ARCO Chemical, propylene and ethylene glycol comparison brochure, May:88
Arrow Automotive Industries, enhanced remanufactured water pump program, Jan:69
Arvin Replacement Products, Gabriel/Maremont Technical Service Answerline, Oct:50
ATK Engines, remanufactured engine catalog, Apr:66
ATP
filter kit, transmission identifier and fluid refill data wallchart, Sep:88
Speedometer Cables and Gears catalog, Nov:86
Automotive Parts Rebuilders Association (APRA)
Business Planning and Strategy video, Mar:116
Inventory Management video, Mar:116
Marketing Without Money video, Mar:116
Auto Shop-Aid, repair tools and equipment catalog, Jan:69
Autodiagnos, product information web site address, Jan:68
Automotive Aftermarket Industry Week 97, attendance records set, Jan:68
Automotive Electronics Services (AES), product and technical information web site address, Jan:69
Automotive Management Institute (AMI)
Increasing Profit by Increasing Proficiency course, Oct:50
Overcoming Objectives and Closing Difficult Sales self-study course, Jul:86
Automotive Parts Rebuilders Association (APRA), *Fundamentals of Hydraulics* seminar, Jan:68
Automotive Service Association (ASA), web site address, Nov:86
Automotive Service Industry Association (ASIA)
Sales Management Training-Field Coaching Program, Feb:92
Salesability seminar, Feb:92
Automotive Systems, LuK RepSets catalog, Jan:69
Automotive Transmission Parts, filter kits catalog, Feb:92
Autospecialty, Kelsey-Hayes ABS Systems catalog, May:88
Beck/Arnley Worldparts Corp. (BWC)
1998 Rotating Electrical Products catalog, Mar:116
import clutch set brochure, Jan:69
Pro Pack 1998 Brake Pad Kits catalog, Feb:92
True Blue Rewards program benefits, Apr:66
Bee Line, *Collision Correction & Wheel Alignment Equipment* catalog, Aug:67
BMW, donation to Komen Breast Cancer Foundation, Jul:86
BWD Automotive
1998 *Borg-Warner Carburetor Tune-Up Kits & Carburetor Floats* catalog, Apr:66
Niehoff brand fuel pump catalog, Feb:92
technical assistance added to web site, Jun:66
California Integrated Waste Management Board, web site address, Nov:86
Canadian Motive Power Instructors Association, new association formed, Mar:116
Cardone Industries, 1998 catalog supplement, Dec:68
Castrol, official supplier to Audi and Volkswagen, May:88
Central Florida Auto Dealers Association, outstanding contribution to vocational education award, Jul:86
Champion Laboratories, web site address, Aug:67
ChekChart, new multimedia packages for ASE test preparation, Jan:68
Chicago Pneumatic, product launch, Nov:86
Chief Automotive Systems, partnership with Hunter Engineering Company, Sep:88
Church & Dwight, partnership with Safety Kleen, Jun:65
Cliplite Manufacturing, *A Breath of Fresh Air* UV leak detection catalog, Jan:69
COATS, Factory Cash Back rebate program, Nov:86
Contact East
1998 *Update* catalog, Jun:66
automotive tool catalog, Dec:68
web site address, Dec:68
Coordinating Committee for Automotive Repair (CCAR), GreenLink Shop web site address, Jan:68, Dec:68
Dana Corp.
Machinist of the Year award given, Nov:86
Perfect Circle Sealed Power Division, supplier of the year award, Jul:86
Solutions quarterly newsletter, Sep:88
top ten technologically innovative companies, Aug:67
Dozier Equipment, material storage and handling buyers guide, Apr:66
DuPont, top-ranked supplier award, Jul:86
Dynagear
1998-99 oil pump catalog, Jun:66
Timing Components catalog, Aug:67
Edelmann, 1999 *Steering Systems Products* catalog, Apr:66
Environmental Protection Agency

(EPA), national emissions standard, Jun:53
Federal-Mogul
Carter AFB Fine Tuning Manual, May:88
Engine Kits Cash Giveaway winners announced, Sep:88
Performance Parts Supplement, Jun:66
Sealed Power Platinum Cash Giveaway Promotion winner, Nov:86
Sealed Power Platinum engine repair marketing program expanded, Apr:66
Steering and Suspension Parts From TRW catalog, Jul:86
web site address, Jan:68-69
Fel-Pro
expanded Engine$aver hardware line, Jul:86
Gasket Installation Tips booklet, May:88
High Performance Engine Rebuilding and Blueprinting School, Apr:66
web site address, Jan:69
Flex-a-lite
engine cooling fan catalog, Sep:88
web site address, Sep:88
Fluke
new catalog, Jan:69
new training package for Hall's Multimedia Series in Automotive Technology, May:88
Ford ASSET, Student Auto Skills Challenge, Jun:54
Gabriel, shocks and struts catalog, Jan:69
Garage Equipment Supply
automotive tool catalog, Apr:66
new wholesale catalog, Feb:92
General Motors, Service Technology Group (STG) Smart Mentor, Jun:51-52
General Motors Dealer Equipment (GMDE) Program, acceptance of Advantage/Globe Lift Systems in-ground retrofit lift, May:88
GNB Technologies, web site address, Jan:69
Go/Dan Industries (GDI), web site address, Jun:66
Gray, lift catalog, Dec:68
Hannay Reels, lubricant hose reel catalog, May:88, Jun:66
Harley Davidson, agreement with Snap-On, Jul:86
Hennessy Industries, R.I.M tire mounting safety instruction kit, Sep:88
Holley, fuel and ignition systems catalog, May:88
Hubbell Wiring Device-Kellems, commercial power cord reels, Mar:117
Hunter Engineering Company, partnership with Chief Automotive Systems, Sep:88
I-CAR, 20th Anniversary International Meeting, Nov:86
Independent Auto Parts of America (IAPA), *Let's Go* promotion, Oct:50
Independent Warehouse Distributors, jobber and installer marketing programs available, Jun:66
Ingersoll-Rand, Ray Evernham Signature Series merchandise catalog, Dec:68
Interamerican Motor Corp., BMW replacement parts catalog, Jan:69
International Copper Association (ICA), CuproBraze process booklet, Oct:50
International Lubricants, *Automatic Transmission Fluid Conversion & Refill Chart,* Sep:88
Intrigue (Oldsmobile), new 3.5-liter twin-cam engine, Jun:52-53
ITT Industries, selling Brake and Chassis Division, Dec:68
Jasper Engine & Transmission, Volume Transmission Division Clinic, Jan:69
Jendham
Diagnosis & Repair of Code and No Code Faults on General Motors Systems with Serial and PID Data, Oct:50
joint training relationship for technician education, May:88
OBDII system seminars, Feb:92
K-Line Industries, automotive machine shop equipment catalog, Jan:69
Kaeser Compressors
Air Compressor Guide, Feb:92, Mar:117
Meeting Your Compressed Air Treatment Needs, Dec:68
web site address, Sep:88
Kendall Motor Oil, reformulated line of oil, Feb:92
L&S Automotive, clutch parts and kits catalog, Dec:68
Landa, automotive solvent-free pressure washers catalog, Dec:68
Lansing Michigan Community College, Automotive Technology Program certified, Jun:66
Lee Manufacturing, brake parts catalog, Aug:67
Lincoln Automotive
air compressor and accessory catalog, Dec:68
jack, crane and stand catalog, Jun:66
Littelfuse
Aftermarket Circuit Protection Products, Mar:116
Automotive Fuse Guide, Jan:69
LS6 (Lincoln), 2000 model unveiled, Jun:55
Mac Tools
1999 Mac Tools Master Mechanic announced, Apr:66
joint training relationship for technician education, May:88
selling Hunter Engineering Company automotive service equipment, Jan:68
Tech 2 Flash diagnostic tool for GM vehicles, Feb:92
Maremont Exhaust Products, *Import Exhaust Catalog,* Dec:68
Mastercool, *Refrigerant Capacities* wall poster, Jun:66
Micro Processor Systems, Inc., web site address, Aug:67
Mobile Air Conditioning Society (MACS)
Certificate Training Program, Sep:88
records set at Convention and Trade Show, May:88
Modine Manufacturing
A Cut Above The Rest condenser brochure, Jul:86
master products catalog, Aug:67
Mohawk Resources Ltd., web site address, Jan:69
Moog Automotive
steering, suspension and driveline buyers guide, May:88
Wheel Alignment Problem Solvers catalog, Jul:86
Mopar Performance Parts, *Mopar Performance Parts 1998 Catalog,* Mar:116
Motor & Equipment Manufacturers Association (MEMA), *International Buyers Guide* of American made automotive products for export, Oct:50
Motorist Assurance Program (MAP), web site address, Jul:86
MotorVac Technologies
Los Angeles Regional Technology Alliance Fast 50 selection, Dec:68
web site address, Jun:66
Mr. Gasket, *Hot New Products Guide* and the *Hurst Catalog,* Feb:93
NAPA Institute of Automotive Technology (N.I.A.T.), Aug:67
Advanced Repair Techniques of Steering and Suspension Systems training program, Aug:67
NAPA/ASE, technician of the year announced, Jan:68
National Automotive Parts Association (NAPA), Automotive Management Institute (AMI) EXCEL 2000 resource program, Nov:85
National Automotive Radiator Service Association (NARSA), web site address, Jul:86
National Automotive Technicians Education Foundation (NATEF)
CHAMP program extended, Oct:50
Lansing Michigan Community College, Automotive Technology Program certified, Jun:66
New England Business Service (NEBS), web site address, Apr:66
New York taxicabs to be powered by natural gas, Jun:53-54
NGK Spark Plugs, web site address, Aug:67
Nickson Industries, exhaust hardware catalog, May:88
Nu-Way Automotive System, prepriced inventory sheets, Jan:69
Nylok Fastener, web site address, Dec:68
Optima Batteries, web site address, Jan:69
Original Engine Management, high-performance engine management components catalog and buyers guide, Mar:117
Overseas Automotive Council (OAC), *International Buyers Guide* of American made automotive products for export, Oct:50
Passport, standards for, Dec:68
Perfect Circle, Machinist of the Year competition, Mar:116
Performance Friction, *Motorsports/Powersports* catalog, Feb:93
Plews Stant, lubrication equipment catalog, Nov:86
Rancho, *Outfit Your Truck* catalog, Nov:86
Raybestos
Understanding Your Brake System illuminated wall sign, Feb:92
updated Brake and Safety Center program, Apr:66
Robert Bosch, fuel pump, wiper blade and oxygen sensor catalogs, Jan:69
Rotor Clip, retaining clip catalog, May:88
RTI Technologies
1998 Hi-Performance Refrigerant Management Centers warranty increased, Mar:116
factory rebate offered, Oct:50
S-K Hand Tools, marketing Facom tool catalog, Dec:68
Safety-Kleen
Introduction to Regulatory Compliance: A Guide to OSHA, EPA and DOT Regulations kit, Jan:69
partnership with Church & Dwight, Jun:65
SEM Products, new automotive coating products, Aug:67
Service Technicians Society (STS)
Heavy Duty Council planned, Dec:68
web site address, Aug:67
Snap-On Diagnostics, named 1997 supplier of the year, Jun:66
Snap-On Tools
agreement with Harley Davidson, Jul:86
partnership with Championship Association of Mechanics (CAM), Sep:88
product catalog on CD-ROM, Apr:66
Society of Automotive Engineers (SAE)
point-and-click method of ordering, Jul:86
Understanding Automotive Electronics fifth edition published, Oct:50
Speed-Pro, High Performance Engine Rebuilding and Blueprinting School, Apr:66
SPX, Tech 2 Flash diagnostic tool for GM vehicles, Feb:92
Steward-Warner, Spanish language catalog, Jan:69
Subaru of America, O.E. PRO Program, Dec:68
Sunnen Products, AmPro line of thermal heat cleaning systems acquired, Mar:117
Target Training Systems
new multimedia packages for ASE test preparation, Jan:68
Nissan Engine Control Systems diagnostic manual, Aug:67
Tech International, tire repair products catalog, Jan:69
The Engine Connection, 1999 *Remanufactured Engines & Cylinder Heads* catalog, Mar:116-117, Apr:66
Timken, product applications/specifications web site address, Jan:68
ToolSource, web site address, Sep:88
Tracer Products
Tracerline Mobile Leak Detection Products catalog, Oct:50
web site address, Jun:66
Truecraft Tools
new catalog, Nov:86
web site address, Mar:116
Trumark, new replacement compressor for Ford and Chrysler, Jan:69
Universal Technical Institute (UTI), Al Unser Scholarship Competition, Jun:54-55
Used Oil Management Association, web site address, Jul:86
VDO North America, *VDO Performance Instruments* catalog, Jan:69
Victor Reinz
1998 master gasket catalog, Dec:68
one piece gasket for General Motors 5.7-liter V8, Aug:67
Wagner Brake Products
two new brake catalogs, Sep:88
web site address, Sep:88
Wagner Lighting, BriteLite line expanded, Mar:117
Waterloo Industries
tool box and storage systems catalog, May:88
web site address, Aug:67
Wix Filtration Products, *Master Catalog,* Oct:50

G

G20 (Infiniti), 1999 tech report, Dec:28-29
G-body truck (Chevrolet), 7.4-liter, miss, rough idle, burning oil (95), Feb:82-83
G-body truck (GMC), 7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
G-body van (Chevrolet)
2.2-liter, false ABS codes (1996), Oct:23
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
G-body van (GMC)
2.2-liter, false ABS codes (1996), Oct:23
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
Gabriel, shocks and struts catalog, Jan:69
Galant (Mitsubishi)
1999 tech report, Dec:27-28
transaxle service (1989-90), Mar:109
Garage Equipment Supply
automotive tool catalog, Apr:66
new wholesale catalog, Feb:92
Gates Rubber Company
aftermarket belt tensioners, Dec:71
Green Stripe SUPERSTAT thermostats, May:86
OE-type steering assembly, Jul:57
PowerGrip SB clamp, Sep:77
Gator Brand, high-performance hose clamps, Aug:68
GDI. *See* Go/Dan Industries (GDI)
General Motors Corp.
See also specific models
2.3-liter, head gasket replacement, Aug:34
5.7-liter, one-piece gasket, Aug:67
A/C accumulator fittings, Apr:64
A/C compressor sealing washer, Oct:35-37
air conditioning wish list, Apr:32-34
catalyst monitoring system, Jul:30
evaporative monitor, Jul:31
headlight lens distortion, Nov:80
Kelsey-Hayes 4WAL ABS system, Jun:30-34
light truck tech report (1998), Feb:25-27
Low Emission Vehicle (LEV), May:70
overheating (1990 on), Dec:58
Service Technology Group (STG) Smart Mentor, Jun:51-52
snapping noise in engine

1998 Motor Magazine Index

compartment, Nov:82-83
Tech 2 Flash diagnostic tool available, Feb:92
unnecessary alternator replacement (1990-95), Oct:40
General Motors Dealer Equipment (GMDE) Program, acceptance of Advantage/Globe Lift Systems in-ground retrofit lift, May:88
General Technologies Corp., SmarTech TA100, engine rpm and ignition firing voltage tester, Nov:16, 21
Gent-l-kleen Products, Advantage Plus hand cleaner, Dec:70
GMM. *See* Graphing multimeter (GMM)
GNB Technologies, web site address, Jan:69
GNYADA. *See* Greater New York Auto Dealers Association (GNYADA)
Go/Dan Industries (GDI)
Ready-Rad HD radiators, Oct:B21
web site address, Jun:66
GOJO Industries, bounty on return of original production dispensers, jars and cans, Dec:53
Golf (Volkswagen)
2.0-liter, hesitation, loss of power, Feb:84-85
1999 tech report, Dec:32
intermittent instrument lighting (1995), Mar:109
no start (mid 80s), Dec:45
noise in engine compartment (1993-95), Aug:62
pops out of gear (1996-97), Jul:77
Golf III (Volkswagen)
inadequate A/C (1993 on), Jul:71
oil in air cleaner (1993-96), Dec:60
Grand Am (Pontiac), growling/grinding noise in "Park" on incline (1992-95), Dec:66
Grand Cherokee (Jeep)
4.0-liter
1999 tech preview, Sep:54-56
bogs under load (1995), Feb:83
false MIL codes (1997), Jun:58
A/C won't cool (1995), Dec:14, 18-19
key-off battery drain (1996), Jul:76
mode lever moves to defrost on acceleration (1993-96), Apr:61
new 3.1-liter five-cylinder turbo-diesel engine, Aug:30-31
software flash updates (1996), Dec:64
Grand Marquis (Mercury)
4.6-liter
cold-start engine noise (1993-96), Oct:40
manufacturing differences (1996 and on), May:81-82
fuel pump electrical noise (1986-94), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Grand Prix (Pontiac)
3.4-liter, MIL on with DTC 1403 (1994-95), Jun:62
composite leaf spring helpers (1988-93), Jul:70
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Grand Vitara (Suzuki), 1999 tech report, Dec:28
Graphing multimeter (GMM), characteristics of, Jan:25
Gray Automotive
lift catalog, Dec:68
Mega-Mate parts washer, Oct:B21
Greater New York Auto Dealers Association (GNYADA), National Automotive Technology Competition, Jul:65
GTI (Volkswagen)
intermittent instrument lighting (1995), Mar:109
noise in engine compartment (1993-95), Aug:62
VR6, 2.8-liter, long cranking times (1995), Jun:59

H

Hannay Reels
LN700 spring-rewind hose reels, Jan:49, Feb:90
lubricant hose reel catalog, Jan:50, May:88, Jun:66
Hansen Enterprises
RF Socket Tray, 1998 Top 20 Tools, Sep:32, 36
socket organizers, Jun:65
Hastings Filters, new packaging for filter line, Jan:49
HC Protek, D-488 digital multimeter, Jun:65
Hennessy Industries
Ammco model 710 on-vehicle brake lathe, Mar:96
Ammco Model 2800 Environmental Lathe Enclosure, Mar:95
1998 Top 20 Tools, Sep:44-45
Ammco Model 4000 combination lathe, Mar:96
R.I.M tire mounting safety instruction kit, Sep:88
Hoffmann USA, model 2500 wheel balancing system, Nov:61
Holley
fuel and ignition systems catalog, May:88
Performance Products fuel systems cleaners, May:67
Honda
See also specific models
1.3-liter, head gasket damage, Aug:34
1.5-liter, head gasket damage, Aug:34
Integrated Motor Assist System (IMA), May:70, 76
noisy rear wheel bearings (1990-97), Nov:84
shorted sensor heaters, Jun:19
Zero Level Emission Vehicle Engine (ZLEV), May:70, 76
Hubbell Wiring Device-Kellems, commercial power cord reels, Mar:117
Hunter Engineering Company
B400 computerized brake tester, Mar:95
BL500 combination brake lathe, Mar:96
Enterprise Alliance, PASSPORT Technical Standards for computer interoperability, Jan:60
GSP 9700 Vibration Control Center, 1998 Top 20 Tools, Sep:45-46
partnership with Chief Automotive Systems, Sep:88
WinAlign 3.0 alignment software, Nov:61
HVAC systems
air conditioning systems assessment form, Apr:41
Mastering the Basics, Apr:37-40
pressure testing summary, Apr:40
put the gauges to work, Apr:38-39
R-134a refrigerant, Apr:38-39
reading the pressure, Apr:38
the refrigeration cycle, Apr:37-38

I

I30 (Infiniti), radio noise, Oct:37
I-CAR, 20th Anniversary International Meeting, Nov:86
I-Tech Engines, reman engines, Mar:123
IAC. *See* International Copper Association (ICA)
IAPA. *See* Independent Auto Parts of America (IAPA)
iATN. *See* International Automotive Technicians Network (iATN)
IBM, Network Vehicle, advanced speech-recognition software, Jan:61
ICA. *See* International Copper Association (ICA)
Icor International, Hot Shot R-12, R-134a, R-500 replacement, Jul:87
IIHS. *See* Insurance Institute for Highway Safety (IIHS)
Impala SS (Chevrolet)
4.3-liter, engine noise (1994-96), Sep:84
4.3/5.0/5.7-liter, engine noise (1994-96), Sep:84
Imperial (Chrysler), cruise control characteristics (1990-93), Nov:81-82
Independent Auto Parts of America (IAPA), *Let's Go* promotion, Oct:50
Independent Warehouse Distributors, jobber and installer marketing programs available, Jun:66
Infiniti, cooling fan installation, Nov:84
Ingersoll Rand
IR108 heavy-duty air ratchet, Feb:90
Ray Evernham Signature Series merchandise catalog, Dec:68
Injectoclean, AG420 Gas Analyzer, Feb:97
Insurance Institute for Highway Safety (IIHS), air bag survey, Mar:6
Integra (Acura), oil leaks (90), Feb:82
Interamerican Motor Corp., BMW replacement parts catalog, Jan:69
International Automotive Technicians Network (iATN), air bag switch installation survey, Mar:6
International Copper Association (ICA)
CuproBraze process booklet, Oct:50
CuproBraze radiators, Apr:56
International Lubricants
Automatic Transmission Fluid Conversion & Refill Chart, Sep:88
Dr. Tranny Kooler Clean, Dec:70
Dr. Tranny Instant Shudder Fixx, Nov:85
Internet, Netscape, Network vehicle, Jan:61
Interro Systems, Inc.
I/M emissions repair station, Dec:75
Personal Diagnostic Workstation, Jun:67, Oct:B21
PST 500 personal OBD II scan tool, Mar:118, Apr:74, May:90, Jun:68
described, Sep:26
Intrepid (Dodge)
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1993 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
Intrique (Oldsmobile), 3.5-liter, 1999 tech preview, Sep:54
Intrique GLS (Oldsmobile), 3.5-liter twin overhead cam V6 engine, Jun:52-53, Aug:29-30
Isuzu
See also specific models
propylene glycol recommendation, Jul:76
IT&T, Inc., Power Graphing Scope, 1998 Top 20 Tools, Sep:42
ITT Automotive
Drive Safer America! campaign, Jan:60
Drive Safer America! road show, Jul:65
ITT Industries, selling Brake and Chassis Division, Dec:68
IVS, Inc., Avstar navigational system, Aug:56-57

J

Jaguar
See also specific models
4.0-liter, A/C switch location change (1993-94), Jun:59
Jasper Engine & Transmission, Volume Transmission Division Clinic, Jan:69
Jeepster (Chrysler), 10th North American International Auto Show (NAIAS), Jan:77-78
Jendham
Diagnosis & Repair of Code and No Code Faults on General Motors Systems with Serial and PID Data, Oct:50
joint training relationship for technician education, May:88
OBD II system seminars, Feb:92
Jetta (Volkswagen)
2.0-liter, hesitation, loss of power (1994), Feb:84-85
1999 tech report, Dec:32
hard starting (late 80s), Oct:25
intermittent instrument lighting (1995), Mar:109
no start (mid 80s), Dec:45
noise in engine compartment (1993-95), Aug:62
pops out of gear (1996-97), Jul:77
replacing the starter, Jul:22, Jul:25
Jetta GLX (Volkswagen)
2.8-liter, long cranking times (1995), Jun:59
inadequate A/C (1993 on), Jul:71
intermittent instrument lighting (1995), Mar:109
Jetta III (Volkswagen)
inadequate A/C (1993 on), Jul:71
oil in air cleaner (1993-96), Dec:60
Jimmy (GMC), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84

K

K-Line Industries, automotive machine shop equipment catalog, Jan:69
Kaeser Compressors
Air Compressor Guide, Mar:117
AMD-6550 compressor drain, Dec:70
compressed air systems guide, Feb:92
Meeting Your Compressed Air Treatment Needs, Dec:68
web site address, Sep:88
Kano Laboratories, SiliKroil rust penetrant and lubricant, Jan:71
Kastar Hand Tools
extra long 5/16-inch terminal battery wrench, Nov:85
ratcheting box wrenches, Jul:82
Kelsey-Hayes 4WAL ABS system
avoiding the pitfalls of diagnosing and servicing, Jun:30-34
code retrieval, Jun:32-33
components, Jun:31-32
diagnostic tips, Jun:33-34
self-tests, Jun:30-31
servicing, Jun:34
system operation, Jun:30
Ken-Tool, torque stick extension kit, Aug:69
Kendall Motor Oil, reformulated line of oil, Feb:92
Kent-Moore, Wheel Hub Resurfacing Kit, 1998 Top 20 Tools, Sep:31

L

L&S Automotive
Alloy Super Joints, Oct:55
clutch parts and kits catalog, Dec:68
Lanair, waste oil heaters, Jan:50, Feb:97
Land Cruiser (Toyota), transfer case lever noise (1994), Jan:67
Land Rover
See also specific models
MAF sensor terminal care, May:85
no start in cold weather (1993-95), Jan:65
Landa, automotive solvent-free pressure washers catalog, Dec:68
Lang Marketing Resources, Inc.
DIYers survey, Dec:55
dwindling number of service shops report, Mar:97-98
growth in light vehicle service industry report, Nov:77
what motivates DIYers report, Mar:98
Lano (Daewoo Motor America), enters U.S. market, Sep:60
Lansing Michigan Community College, Automotive Technology Program certified, Jun:66
LeBaron (Chrysler)
cruise control characteristics (1989-95), Nov:81-82
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
Lee Manufacturing, brake parts catalog, Aug:67
Legacy (Subaru)
2.2-liter, engine oil seepage (up to 1991), Mar:109
engine stumble with A/C on (1993), Oct:23-24
oil pump leak (1995), Feb:85
suspension noise (1990), Jan:65-66
various DTCs (1995), Nov:80-81
Leganza (Daewoo Motor America), enters U.S. market, Sep:60
Leica, Inc.
Duo-Chek Engine Coolant & Battery Tester, Sep:78, Oct:B21
Lenan Corp.
waste oil heaters, Oct:B21, Dec:72
L.E.S., Camsticks, Nov:87
LeSabre (Buick)
A/C system thump (1995-97), Dec:64
ABS/traction warning light on (1995), Jun:60-62
detonation, oil burning (1993-95), Dec:60-61
gasoline odor (1987), Jun:10, 12-13

growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
LEV. *See* Ultra Low Emission Vehicle (ULEV)
Lexus
See also specific models
1999 tech report, Dec:26
steering gear/steering wheel service tips, Dec:64
LHS (Chrysler)
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1993 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
Life Automotive Products, Tru-Volt electronic contact cleaner/protectant, Oct:55
Light truck tech report
1998 Durango (Dodge), Feb:25
1998 Frontier (Nissan), Feb:28
1998 GM trucks, Feb:25-27
1998 M-Class (Mercedes Benz), Feb:27-28
1998 Ranger (Ford), Feb:22-25
1998 Tacoma (Toyota), Feb:28
Lincoln Automotive
air compressor and accessory catalog, Dec:68
Eagle Series heavy-duty engine stand, Dec:70
jack, crane and stand catalog, Jun:66
Power Luber cordless/rechargeable grease gun, Apr:67, Oct:B22
Quick Kick battery chargers, Dec:71
Lisle Corp.
50750 oil filter pliers, Jan:49
50950 truck and tractor oil filter pliers, Jan:50
brake caliper bit set, Mar:96
gasket scraper, Jan:70-71
heavy-duty snap ring pliers, Oct:55
parking brake cable remover, Mar:96, Jun:65
Littelfuse
Aftermarket Circuit Protection Products catalog, Mar:116
Automotive Fuse Guide, Jan:69
Low Emission Vehicle, Toyota, May:70
Low Emission Vehicle (LEV)
Chrysler Corp., May:70
General Motors Corp., May:70
Honda, May:70
LS6 (Lincoln), 2000 model unveiled, Jun:55
LSS (Oldsmobile), A/C system thump (1996-97), Dec:64
LuK
Clutch System Diagnostic Guide, Feb:94, Mar:118, May:90, Jul:88, Sep:91, Oct:B22, Nov:87
RepSet Pro Gold series clutch sets, Nov:73
Lumina (Chevrolet)
3.4-liter, MIL on with DTC 1403 (1994-95), Jun:62
composite leaf spring helpers (1988-93), Jul:70
convertor doesn't light off (1997), May:48-50
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Lumina APV (Chevrolet)
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80

M

M-Class (Mercedes Benz)
truck, tech report (1998), Feb:27-28
Ultra-Low-Emissions-Vehicle (ULEV), Mar:101
M/L minivan (Chevrolet)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
M/L minivan (GMC)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
Mac Tools
1999 Mac Tools Master Mechanic announced, Apr:66
ET2025 power graphing scope, Jan:27
joint training relationship for technician education, May:88
Scanalizer Fuel System Tester, 1998 Top 20 Tools, Sep:45
selling Hunter Engineering Company automotive service equipment, Jan:68
Tech 2 Flash diagnostic tool for GM vehicles, Feb:92
MACS. *See* Mobile Air Conditioning Society (MACS)
Magellan Systems Corp., PathMaster vehicle navigation system, Mar:98-99
Magnuson-Moss Warranty Act, warranty work by independent shops, Mar:9
MAP. *See* Motorist Assurance Program (MAP)
Maremont Exhaust Products, *Import Exhaust Catalog*, Dec:68
Mark VIII (Lincoln)
4.6-liter, cold-start engine noise (1993-96), Oct:40
fuel pump electrical noise (1986-92), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Master Tech Products, Pressurator cooling system tester, Jan:72
Mastercool, *Refrigerant Capacities* wall poster, Jun:66
Material Safety Data Sheets (MSDS), posting and filing of, Jan:32-33
Maxima (Nissan)
clutch chatter (1989-92), Sep:87
coolant leak (1989-94), Dec:64, 66
procedures for jump-starting (1989-92), Jul:12
V6, heater gurgle (1989), Jan:63
MBNA. *See* Mercedes Benz North America
MED7, motronic engine management systems, Bosch, May:19-20
Meguiars, adjustable buffer handle, Feb:88
MEMA. *See* Motor & Equipment Manufacturers Association (MEMA)
Mercedes Benz
See also specific models
1999 tech report, Dec:28
coolant temperature sensor diagnosis (mid 80s-90s), Dec:44-45
surge, hesitation (mid 80s-90s), Dec:45
Vehicle Dynamics Control (VDC), Jan:18, 20
water pump drainage tube retrofit (before 1992), May:83
Mercedes Benz North America, opens new service centers, Jan:60-61
Merkur (Mercury), 2.3-liter, warbling noise from engine compartment (1985-89), Jan:66
Micro Processor Systems, Inc. (MPSI)
DM 1000 multimeter, Nov:87
Pro-Link Plus scan tool, Oct:B22 described, Sep:28
Scan Tools Shootout, Nov:75-77
SpectraGas Portable 5-Gas Analyzer, Sep:46-47
web site address, Aug:67
Micro-Tech, remanufactured computers for Asian and European vehicles, Feb:14, 16
Midtronics
Micro400 Digital Battery Analyzer, Jan:70
Micro500, charging system performance tester, Nov:21
Mill Supply, Inc., restoration parts catalog, Sep:91
Mirage (Mitsubishi)
1.5-liter, rough idle, stalling (1990-94), Jan:65
transaxle service (1989-90), Mar:109
ML340 (Mercedes Benz), new Sky Roof option, May:70
Mobil Corp., high-efficiency oil filters, Jan:49, May:86
Mobile Air Conditioning Society (MACS) annual convention report, Apr:27-30, 32-34
Certificate Training Program, Sep:88
questions EPA blend recycling rule, Sep:61-62
records set at Convention and Trade Show, May:88
Modine Manufacturing
A Cut Above The Rest condenser brochure, Jul:86
master products catalog, Aug:67
Mohawk Resources Ltd.
educational two post lift comparison booklet, Oct:B22, Nov:93, Dec:72
USL-6000 Universal Scissors Lift, Mar:110
1998 Top 20 Tools, Sep:36
web site address, Jan:69
Moog Automotive
chassis assortment incentives, Aug:70
chassis height locator tool, Jul:57
correction to 800 number in *Source Guide*, Dec:55, 82
interactive counter display, Jul:87
K8702 sway bar link, Oct:B22, Nov:93
radius arm insulator, Jul:58
steering, suspension and driveline buyers guide, May:88
Wheel Alignment Problem Solvers catalog, Jul:86
Mopar Performance Parts
engine oil and filters, Jan:50
Mopar Performance Part 1998 Catalog, Mar:116
OE coolant components, Sep:77
OE quality fuel components, May:67
remanufactured CV axles, Nov:73
remanufactured electronic engine controllers, Dec:71
Smart Valve Technology (SVT) shocks and struts, Feb:94, Jun:67, Jul:57, Oct:B20
timing belts, Apr:73
Motor & Equipment Manufacturers Association (MEMA), *International Buyers Guide* of American made automotive products for export, Oct:50
Motor Guard, Magna Guard air chisel shield, Oct:55
MOTOR Magazine
95 years ago, Jul:2
1998 ASE Automobile Technician of the Year, Dec:51
back issues, Jun:73
Service Slants on disk, May:95, Jun:73, Jul:93
web site address, Jul:2
MOTOR **Parts Bin**
See also Parts, Accessories and Supplies; Tools and Equipment; **Tools of the Trade**
, Jan:75, Feb:94, Mar:118, Apr:67, May:90, Jun:67, Jul:87, Aug:70, 75, Sep:91, Nov:87, Dec:71
MOTOR Publications
Domestic Component Locator Manual, Oct:B21
Domestic Electrical Accessory Repair Manual, Oct:B20
Sensor Operation & Testing Manual, Oct:B22
Waveform Reference Manual, Apr: 74, Oct:B24
MOTOR/ALLDATA
computerizing the shop, Mar:113-114
system assessment, Jan:54-56
Motorist Assurance Program (MAP)
goes national, Dec:54
web site address, Jul:86
Motorlife Distributors, Bilstein R-2000 Engine Flush System, May:86, 90
MotorVac Technologies
Los Angeles Regional Technology Alliance Fast 50 selection, Dec:68
Transtech ATF recycler, Apr:74
TRANSTECH transmission fluid flusher, Mar:110
web site address, Jun:66
Mountaineer (Mercury), 4.0-liter, recall for fire hazard during jump-start, Jul:12
MPSI. *See* Micro Processor Systems, Inc. (MPSI)
MPV (Mazda), flashing defogger light, Dec:60
Mr. Gasket
Hot New Products Guide, Feb:93
Hurst Catalog, Feb:93
MSDS. *See* Material Safety Data Sheet (MSDS)
Mustang (Ford)
2.3-liter, warbling noise from engine compartment (1985-92), Jan:66
4.6-liter, cold-start engine noise (1993-96), Oct:40
fuel pump electrical noise (1986-96), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Mustang GT (Ford), 5.0-liter, growling clutch (1994), Dec:58
MX-6 (Mazda), front strut squeak (1993-96), Jul:76
Mystique (Mercury)
2.5-liter
engine noise on startup (1995), Jan:62-63
no power on takeoff (1995), Jun:62
water pump squeal (1995-96), Sep:80, 82
lots of codes, no driveability problem (1996), Jul:71

N

NAPA Institute of Automotive Technology (N.I.A.T.), *Advanced Repair Techniques of Steering and Suspension Systems* training program, Aug:67
NAPA/ASE, technician of the year announced, Jan:68
NARSA. *See* National Automotive Radiator Service Association (NARSA)
NASCAR
chassis and aerodynamic testing, Mar:36-37
fuel cells, Mar:37-38
on-board fire extinguishing systems, Mar:38-39
preparing for the race season, Mar:31-35
NATEF. *See* National Automotive Technicians Education Foundation (NATEF)
National Automotive Parts Association (NAPA)
1998 Domestic New Car & Truck Warranties wall chart, Oct:B22
1998 Imported New Vehicle Warranties wall chart, Dec:33-40
Asian Engine Management Systems self-study course, Aug:69
Auto-Attitudes Report, fighting negative stereotypes, Jul:66
Automotive Management Institute (AMI) EXCEL 2000 resource program, Nov:85
National Automotive Radiator Service Association (NARSA), web site address, Jul:86
National Automotive Technicians Education Foundation (NATEF)
CHAMP program extended, Oct:50
Lansing Michican Community College, Automotive Technology Program certified, Jun:66
National Center for Vehicle Emissions Control and Safety (NCVECS), on-board diagnostics study, Jan:2
National Highway Traffic Safety Administration (NHTSA)
air bag on/off switch ruling, Jan:59-60
air bag on/off switch update, Sep:64
new air bag regulations, Dec:53-54
National Institute for Automotive Service Excellence (ASE), glossary of automotive words and phrases in English and Spanish published, Nov:77
National Institute for Occupational Safety and Health (NIOSH), safety and environmental contact information, Jan:34
National Radiator Service Association (NARSA), repairing the "unfixable" OE radiators, Aug:40-44, 46-47
Navigator (Mercury), 1999 tech preview, Sep:56-57, 59
NCVECS. *See* National Center for Vehicle Emissions Control and Safety (NCVECS)
NEBS. *See* New England Business

1998 Motor Magazine Index

Service (NEBS)
Neon (Dodge)
cruise control surges or doesn't work (1995), Jun:60
front suspension popping noise (1995), Sep:86
misrouted engine harness (1996), Feb:79
Neon (Plymouth), front suspension popping noise (1995), Sep:86
Netscape, Network Vehicle, Internet access, Jan:61
Network Vehicle, concept car, Jan:61
Neutronics, Inc., refrigerant contamination, Sep:64
New Beetle (Volkswagen)
1.9-liter TDI diesel engine, Aug:30-31
10th North American International Auto Show (NAIAS), Jan:74
1999 tech report, Dec:32
New England Business Service (NEBS), web site address, Apr:66
New Yorker (Chrysler)
3.3-liter, rocker arm shaft pedestal broken (1991), Nov:6, 11
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1989 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
New Yorker Salon (Chrysler), cruise control characteristics (1989-93), Nov:81-82
Newsbreak
9-3 (Saab), U.S. passenger-side split wide-angle outside mirror, Sep:62-63
9-5 (Saab)
U.S. passenger-side split wide-angle outside mirror, Sep:62-63
wagon unveiled, Jul:66
10th North American International Auto Show (NAIAS), Feb:71-74, 76-78
aftermarket survey results, Aug:56
American Automobile Association (AAA), aggressive driving survey results, Dec:52
American Honda Motor Company, Inc., CarLink smart card technology, Apr:53-54
Automotive Service Association (ASA)
finding good employees survey results, Dec:54-55
web site service expectations poll results, Jan:61
works to enhance industry image, Jul:65
Automotive Service Industry Association (ASIA), *The Shape & Size of the USA Motor Vehicle Aftermarket: A Profile*, Jul:68-69
Better Business Bureau (BBB), dealership survey results, May:78-79
BMW of North America, training partnership with Universal Technical Institute, Inc., Jul:64
California Air Resources Board (CARB), On-Board Diagnostics (OBD) lawsuit, Mar:99
Car Care Council (CCC)
Certified Inspection (CI) program, Mar:99
women and car care survey results, Jul:65
Cavalier (Chevrolet), 2.2-liter, stalling, rough running, no-starts code 42 (1990-91), Apr:58
Chrysler Corp., Low Emission Vehicle (LEV), May:70
Council of Advanced Automotive Trainers (CAAT)
Core Services Task Assessment CDT-1, May:67
Driveability and Emissions Assessment CDT-2, May:69-70
Daewoo Motor America, enters U.S. market, Sep:60
Dana Corp.
creates Automotive Aftermarket Group, Sep:62
Technical Resource Park (TRP), Jan:58-59
Davis Institute of Transportation Studies, CarLink smart card technology, Apr:53-54
Department of Transportation (DOT), final ruling on air bags, Jan:59-60
DeVille (Cadillac), thermal imaging available, Nov:74-75
Enterprise Alliance, PASSPORT Technical Standards for computer interoperability, Jan:60
Environmental Protection Agency (EPA)
allows recycling of refrigerant blends, Jul:64
final ruling on vehicle inspection and maintenance, Jul:69
new OBD regulation, Apr:55-56
violation penalties reduced, May:78
Federal-Mogul Corp.
engine repair turnaround, May:68
NASCAR Winston Cup tech line, Aug:56
Ford Motor Company
closed-loop recycled batteries, Jan:61
Low-Emissions Vehicle (LEV), Apr:70
recycled material tires, Mar:100-101
team with NASA's Jet Propulsion Laboratory (JPL) to bring artificial intelligence to trucks and cars, Dec:52-53
Worldwide Diagnostic System (WDS), Apr:54-55
General Motors, Low Emission Vehicle (LEV), May:70
GOJO Industries, bounty on return of original production dispensers, jars and cans, Dec:53
Greater New York Auto Dealers Association (GNYADA), National Automotive Technology Competition, Jul:65
Honda
Integrated Motor Assist System (IMA), May:70, 76
Zero Level Emission Vehicle Engine (ZLEV), May:70, 76
International Copper Association (ICA), CuproBraze radiators, Apr:56
ITT Automotive
Drive Safer America! Campaign, Jan:60
Drive Safer America! road show, Jul:65
IVS, Inc., Avstar navigational system, Aug:56-57
Lang Marketing Resources, Inc.
DIYers survey, Dec:55
dwindling number of service shops report, Mar:97-98
growth in light vehicle service industry report, Nov:77
what motivates DIYers report, Mar:98
M-Class (Mercedes Benz), Ultra-Low-Emissions-Vehicle (ULEV), Mar:101
Magellan Systems Corp., PathMaster vehicle navigation system, Mar:98-99
Mercedes Benz North America, new service centers open, Jan:60-61
ML340 (Mercedes Benz), new Sky Roof option, May:70
Mobile Air Conditioning Society (MACS), questions EPA blend recycling rule, Sep:61-62
Moog Automotive, correction to 800 number in *Source Guide*, Dec:55
MOTOR Magazine, 1998 ASE Automobile Technician of the Year, Dec:51
Motorist Assurance Program (MAP), goes national, Dec:54
National Automotive Parts Association (NAPA), Auto-Attitudes Report, combats negative stereotypes, Jul:66
National Highway Traffic Safety Administration (NHTSA)
air bag on/off switch ruling, Jan:59-60
air bag on/off switch update, Sep:64
new air bag regulations, Dec:53-54
National Institute for Automotive Service Excellence (ASE), glossary of automotive words and phrases in English and Spanish published, Nov:77
Network Vehicle concept car, Jan:61
Neutronics, Inc., refrigerant contamination, Sep:64
Nissan, "Mr. K" inducted into Automotive Hall of Fame, Dec:54
Partnership for a New Generation of Vehicles (PNGV), FutureCar Challenge, Aug:55-56
Parts Plus, sixth annual national convention, Jul:65
Polk Company, registered vehicle report, Sep:62, 64
Prius (Toyota), hybrid gas/electric vehicle, Nov:74
Remanufacturing Industries Council International (RICI), equipment recycling/remanufacturing tax credit, May:78
S80 (Volvo), Dynamic Stability and Traction Control (DSTC), Apr:54
S2000 (Honda), two seat roadster, Dec:52
Service Technicians Society (STS)
president named, Apr:53
Scan Tool Shootout update, Nov:75-77
Siemens Automotive, diesel engine catalytic converter module, Mar:100
Snap-On Diagnostics, Integrity VIP use vehicle certification system, Jan:59
Snap-On Tools, pit crew Dream Team, Mar:97
Society of Automotive Engineers, SAE J1772 Electric Vehicle Charging Standards, Aug:57
Society of Automotive Engineers (SAE), international student design competition, Apr:53
Specialty Equipment Market Association (SEMA), Arizona bill to deny scrappage, Sep:60-61
teenage driving bill, Dec:52-53
Toyota, Low Emission Vehicle (LEV), May:70
Universal Technical Institute, Inc, training partnership with BMW of North America, Jul:64
U.S. Environmental Protection Agency (EPA), On-Board Diagnostics (OBD) lawsuit, Mar:99
Valvoline/ASE Poll of the American Mechanic, results, Sep:62
Volvo, bi-fuel vehicles, May:77-78
Wagner Brake Products, correction to 800 number in *Source Guide*, Dec:55
NGK Spark Plugs, Inc.
expanded line, May:67
web site address, Aug:67
NHTSA. *See* National Highway Traffic Safety Administration (NHTSA)
Nickson Industries, exhaust hardware catalog, May:88
Ninety Eight (Oldsmobile)
ABS/traction warning light on (1995), Jun:60-62
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
NIOSH. *See* National Institute for Occupational Safety and Health (NIOSH)
Nissan
See also specific models
3.0-liter
engine leaks (1984 to mid 90s), Apr:14, 16
timing belt replacement (1984 to mid 90s), Apr:14, 16
correct oil level and grade, Apr:64
Key Value front brake pads, Jul:87, Aug:75
"Mr. K" inducted into Automotive Hall of Fame, Dec:54
new 1985-1995 engine diagnostic manual, Aug:70
survey on leak detection methods, Apr:28-29
Nu-Way Automotive System, prepriced physical inventory sheets, Jan:69
Nubira (Daewoo Motor America), enters U.S. market, Sep:60
Nylok Fastener, web site address, Dec:68

O

OAC. *See* Overseas Automotive Council (OAC)
OBD
aftermarket associations lawsuit, Mar:99
changing California On-Board Diagnostic (OBD) regulations, Apr:2
Environmental Protection Agency (EPA), new regulation, Apr:55-56
OBD II
Are Technicians Ready for OBD II?, Jun:2
Autodiagnos, Multitester Plus described, Sep:28
Baum Tools Unlimited, OBD2Scan, Oct:16, 19
Chrysler
catalyst monitoring system, Jul:29-30
evaporative monitor, Jul:31
oxygen sensor heater, Jul:30
contaminated oxygen sensors, Oct:35
data acquisition speed, Jun:22-23
diagnostic testers for Asian and European vehicles, Aug:14, 17
EASE Simulation
QuikCode hand-held tester described, Sep:26
QuikCode Windows-based scan tool, Oct:16, 19
enhanced vs. generic data, Jun:23-24
Ford
catalyst monitoring system, Jul:30
evaporative monitor, Jul:31
oxygen sensor heater, Jul:30
General Motors
catalyst monitoring system, Jul:30
evaporative monitor, Jul:31
oxygen sensor heater, Jul:30
generic parameters, Oct:20-21
heated oxygen sensors, difficulties with diagnosing problems of, Dec:24-25
Interro Systems, PST500 hand-held tester described, Sep:26
Micro Processor Systems, Inc. (MPSI), Pro Link scan tool described, Sep:28
OBD II and the Automotive Technician, Jun:2
PC-based scanners, Oct:16, 19
protocols, Jun:25
reprogramming flash PROMs, Aug:4, 6
Snap-On Tools
entry-level generic scan tool, Oct:19
MT-2500 scanner described, Sep:28
steps to repair an OBD II diagnostic trouble code, Jul:32
traditional scanner platforms available for Asian and European vehicles, Sep:26, 28
Upclose, in-depth look at OBD II, 7-34, Jul:28-32
Vetronix, Tech 1 series scanners described, Sep:28
Occupational Safety and Health Administration (OSHA)
Employee Safety Programs, Oct:44-46
environmental violation fines, Jan:28
safety and environmental contact information, Jan:34
Odyssey (Honda), 1999 tech report, Dec:29
OE Scheduled Maintenance
cooling systems, Sep:65, 67-68
correction to *Vehicle Manufacturers' Recommended Maintenance Intervals* brakes, May:102
correction to *Vehicle Manufacturers' Recommended Maintenance Intervals* cooling systems, Dec:82
drivelines, Nov:62-64
engine performance, May:55, 57-58
key to survival, Jan:36-37
oil, filter and chassis lubrication, Jan:38-40
Product Showcase, Jan:49-50, Mar:95, May:67, Jul:57-58, Sep:77-78, Nov:73
steering and suspension, Jul:46-48
Vehicle Manufacturers' Recommended Maintenance Intervals
Brakes, Mar:87-94
Cooling Systems, Sep:69-76
Driveline, Nov:65-72
Engine Performance, May:59-67
Oil, Filter and Chassis Lubrication, Jan:41-48
Steering and Suspension, Jul:49-56
Oil, Filters & Chassis Lubrication
OE Scheduled Maintenance, Jan:38-40
Vehicle Manufacturers' Recommended Maintenance Intervals, wall chart, Jan:41-48

On-board diagnostics. *See* OBD; OBD II
Opel (General Motors), new diesel, Aug:30-31
Optima Batteries, updated web site address, Jan:69
Original Engine Management
1998 Original Management Program, Feb:97
high-performance engine management components catalog and buyers guide, Mar:117
OSHA. *See* Occupational Safety and Health Administration (OSHA)
OTC
ABS reader with directional control, Mar:95
GTI graphing software, Sep:90
Perception combination scope/graphing multimeter, Jan:27, Mar:111-112
quick disconnect tool assortment, Jun:65
Scan Tools Shootout, Nov:75-77
Overseas Automotive Council (OAC), *International Buyers Guide* of American made automotive products for export, Oct:50

P

P-body truck (Chevrolet)
4.3/5.0/5.7-liter
engine noise (1996-97), Sep:84
improper EGR valve installation (1993-96), Feb:84
7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
P-body truck (GMC)
4.3/5.0/5.7-liter
engine noise (1996-97), Sep:84
improper EGR valve installation (1993-96), Feb:84
7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
Park Avenue (Buick)
A/C system thump (1995-97), Dec:64
ABS/traction warning light on (1995), Jun:60-62
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Partnership for a New Generation of Vehicles (PNGV), FutureCar Challenge, Aug:55-56
Parts, Accessories and Supplies
ACDelco
automotive replacement parts, Dec:71
professional car and truck battery, Jul:87
steering system components, Jul:57
ACDelco D3EA seal on DuraStop packages, Mar:123
AlliedSignal, Inc.
Autolite Platinum Pro spark plugs, Jul:87
Bendix IQ brake pad, Aug:70
Bendix IQ loaded calipers, Sep:91
Fram Extra Guard oil filters, Nov:87
Fram Tough Guard oil filter, Jan:49
Baldwin Filters, Ford 7.3-liter diesel air filters, May:67
Beck/Arnley Worldparts Corp. (BWC)
Blue Thunder wire sets, May:67
import cooling system parts, Sep:78
oil, air and fuel filters, Jan:49
Pro Pack brake pad kits, Jun:68
remanufactured starters and alternators, Sep:92
Cardone Industries, Inc., Ride Saver Plus remanufactured gas-charged struts, Jul:57
Chrysler Corp., Mopar OE quality brake components, Mar:96
Coni-Seal, all new master brake cylinder, Jun:68
EIS Brake Parts, X-tender QMX disc brake pads, Mar:95
Federal-Mogul Corp.
low-friction tie rods, Jul:57
Sealed Power Platinum engine kits, May:67
Gates Rubber Company
aftermarket belt tensioners, Dec:71
OE-type steering assembly, Jul:57
Hannay Reels, lubrication hose reel catalog, Jan:50
I-Tech Engines, reman engines, Mar:123
Icor International, Hot Shot R-12, R-134a, R-500 replacement, Jul:87
Mobil Corp., Mobil 1 High-Efficiency oil filter, Jan:49
Moog Automotive
interactive counter display, Jul:87
radius arm insulator, Jul:58
Mopar Parts
Chrysler filters, Jan:50
Chrysler oil, Jan:50
fuel components, May:67
remanufactured electronic engine controllers, Dec:71
Smart Valve Technology shocks and struts, Jun:67, Jul:57
timing belts, Apr:73
NGK Spark Plugs (U.S.A.), Inc., expanded line, May:67
Nissan, Key Value brake pads, Jul:87, Aug:75
Original Engine Management, *1998 Original Engine Management Program*, Feb:97
Raybestos Brakes
Brutestop performance rotors, Mar:95
PG Plus Super Stop brake pads, Jun:67
severe-duty BRUTESTOP Performance Rotors, Mar:118
Standard Motors, oxygen sensors, May:67
Timken, bearings and seals, Jun:67, Aug:75
Toyota, *Star Service News*, Mar:118
UBP, ultimate brake rotor, Jun:67, Aug:70
Valvoline
DuraBlend semi-synthetic oil, Jan:50
synthetic oil, Jan:49
Wagner Brakes, DOT 5.1 brake fluid, Aug:70, Nov:87
Parts Plus, sixth annual national convention, Jul:65
Paseo (Toyota), steering column knock (1994), Oct:26
Passat (Volkswagen)
2.0-liter, intermittent no-starts (1990-95), Sep:83
2.8-liter, intermittent no-starts (1990-95), Sep:83
GLX, 2.8-liter, long cranking times (1995), Jun:59
inadequate A/C (1993 on), Jul:71
pops out of gear (1996-97), Jul:77
service manual corrections (1995 on), Dec:66
PASSPORT Technical Standards, Dec:68
Enterprise Alliance, for computer interoperability, Jan:60
Pathfinder (Nissan)
3.0-liter, engine replacement (1995-96), Jul:73
coolant leak (1990-95), Dec:64, 66
front end service upgrade (1989-90), Mar:109
hard or no start (1990-95), Nov:80
heater gurgle (1989), Jan:63
PathMaster vehicle navigation system, Magellan Systems Corp., Mar:98-99
PBR Industries, LP line of parts washers, Jan:71
Penco Products
Clipper Industrial Shelving Systems, Oct:55
modular work benches, Feb:91
Perfect Circle, Machinist of the Year competition, Mar:116
Performance Friction, *Motorsports/Powersports* catalog, Feb:93
PGM. *See* Power graphing meter (PGM)
PGS. *See* Power graphing scope (PGS)
Phoenix Systems
brake and clutch bleeding injectors, Oct:B22
injectors, Oct:B22
Pickup (Chevrolet), 2.2-liter, false ABS codes (1996), Oct:23
Pickup (GMC), 2.2-liter, false ABS codes (1996), Oct:23
Pickup (Isuzu), 4ZD1/4ZE1 engine idle vibration (1990-91), Mar:108
Pickup (Nissan), V6, heater gurgle (1989), Jan:63
Pickup (Toyota), squealing clutch (1990), Oct:42
Plews Stant, lubrication equipment catalog, Nov:86
Polk Company, registered vehicle report, Sep:62, 64
Porsche
See also specific models
2.7-liter, coolant in the oil (1987-89), Dec:60
5.0-liter, coolant in the oil (1987-89), Dec:60
Power graphing meter (PGM), characteristics of, Jan:25-26
Power graphing scope (PGS), characteristics of, Jan:27
Powerhouse Products
Rodhandler welding rod feeder, Dec:70
Universal Harmonic Balancer Installation Kit, Jan:71
Precis (Mitsubishi), transaxle whine (1990-93), Oct:24
Prestone, Cooling System Treatment, Sep:77
Prius (Toyota), hybrid gas/electric vehicle, Nov:74
Pro-Cut International
PFM900 computerized on-car brake lathe, Mar:96
1998 Top 20 Tools, Sep:36
Probe (Ford)
fuel pump electrical noise (1989-92), Nov:78-79
rough idle, miss (1994), Jun:58-59
Protege (Mazda)
1999 tech report, Dec:32
exhaust noise (1995-96), Nov:81
Pyroil Performance Products, DOT3 and DOT4 brake fluid, Nov:85

Q

Quaker State, new clear packaging for oil, Jan:50
Quest (Nissan)
3.0-liter, engine replacement (1995-96), Jul:73
1999 tech report, Dec:29
coolant leak (1993-95), Dec:64, 66
steering groans (1993), Feb:83-84
tranny whine (1993-94), Jun:62

R

R&B, Inc., Uni-Fit CV Boots, Nov:73
Radiator, repairing the "unfixable" OE radiator, Aug:41-44, 46-47
Ram 50 pickup (Dodge), engine runs too rich (1989), Jul:4-5
Ram cab & chassis (Dodge), rear brake wear (1989-93), May:82
Ram pickup (Dodge)
2WD, replacing lower ball joints (1994-96), May:85
3.9-liter, engine surge on the road (1994-95), Apr:58, 60
mode lever moves to defrost on acceleration (1994-96), Apr:61
normal startup noises (1996), Feb:85
rear brake wear (1989-93), May:82
self-sustaining steering shimmy (1994-96), Mar:102, 104
software flash updates (1996), Dec:64
wheel runout (1994-95), Oct:25
Ram truck (Dodge), brake squeal, Aug:62
Ram van/wagon (Dodge)
normal startup noises (1996), Feb:85
software flash updates (1996), Dec:64
wheel runout (1994-95), Oct:25
Rancho, *Outfit Your Truck* catalog, Nov:86
Range Rover (Land Rover)
3.9-liter, spark plug update (1987 on), Dec:60
4.0-liter, height sensor DTCs, Jun:59
4.2-liter, spark plug update (1987 on), Dec:60
defective timing gear (1995-96), Dec:64
Range Rover County (Land Rover), inoperative tach/hard starting (1995 and before), Oct:26
Ranger (Ford)
2.3-liter, warbling noise from engine compartment (1985-92), Jan:66
4.0-liter, lumpy idle (1994), Mar:104
fuel pump electrical noise (1989-96), Nov:78-79
grabbing brakes (1983-97), Oct:25-26
lots of codes, no driveability problem (1996), Jul:71
tech report (1998), Feb:22-25
Raybestos Brakes
Brake and Safety Center program updated, Apr:66
Brutestop performance rotors, Mar:95, 118, Oct:B23
PG Plus Super Stop brake pads, Jun:67
Understanding Your Brake System illuminated wall sign, Feb:92
vacuum bleeder, Sep:90
Raytek
noncontact thermometers, Mar:123
Raynger MX Series Infrared Thermometer, May:90, Nov:87, Dec:72
1998 Top 20 Tools, Sep:41-42
Raynger ST3 thermometer, Jul:88
Ready Fixtures, Automotive Tool Caddy, Sep:90
Regal (Buick)
composite leaf spring helpers (1988-93), Jul:70
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Regency (Oldsmobile), A/C system thump (1997), Dec:64
Reliant (Plymouth), charging system problems (1986), Jul:10-11
Remanufacturing Industries Council International (RICI), equipment recycling/remanufacturing tax credit, May:78
Reynolds and Reynolds, Enterprise Alliance, PASSPORT Technical Standards for computer interoperability, Jan:60
Reznor, waste oil furnace, Feb:94, Jun:67, Sep:91
RICI. *See* Remanufacturing Industries Council International (RICI)
Riviera (Buick)
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-93), Dec:66
new design front-wheel-drive hub (1992-93, 1995), Sep:80
Roadmaster (Buick)
4.3-liter, engine noise (1994-96), Sep:84
4.3/5.0/5.7-liter, engine noise (1994-96), Sep:84
Robert Bosch
IAR replacement alternators, May:86
Motronic engine management systems, May:19-20
three new catalogs covering fuel pumps, wiper blades and oxygen sensors, Jan:69
yaw rate sensors, Jan:20
Rodeo (Isuzu), 3.2-liter, replacing valve covers, Dec:60
Rotary Lift
open front alignment rack, Oct:B23, Nov:93
SM180 four-post above ground lift, Feb:88
Rotor Clip
retaining clip catalog, May:88
retaining ring pliers, Jul:82
RTI Technologies
1998 Hi-Performance Refrigerant Management Centers warranty increased, Mar:116
BRC480 dual mode on car brake lathe, Nov:61, 85
factory rebate offered, Oct:50
RHS780 A/C Refrigerant Handling System, Apr:73
RX300 (Lexus), 1999 tech report, Dec:26-27

1998 Motor Magazine Index

S

S4 (Audi), R-134a system capacity (1992 on), Jun:59-60
S6 (Audi), R-134a system capacity (1992 on), Jun:59-60
S70 (Volvo), bi-fuel vehicle, May:77-78
S80 (Volvo)
1999 tech report, Dec:30-31
Dynamic Stability and Traction Control (DSTC), Apr:54
most technologically advanced vehicle, Oct: B24, Dec:75
S320 (Mercedes Benz)
high idle (1995 and before), Jun:62
high idle speed after cold start (up to 1995), Jul:73-74
S2000 (Honda), two seat roadster, Dec:52
S-10 (Chevrolet), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
S-10 (General Motors Corp.), 10th North American International Auto Show (NAIAS), Jan:71
S-K Hand Tools, marketing Facom tool catalog, Dec:68
S/T pickup (Chevrolet)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
S/T pickup (GMC)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
S/T sport/ute (Chevrolet)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
S/T sport/ute (GMC)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
Sable (Mercury)
A/C doesn't cool (1994), Aug:10, 12-13
clicking noise in reverse (1994-96), Apr:60
contaminated fuel tank (1993-94), May:84
fuel pump electrical noise (1986-95), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
SAE. *See* Society of Automotive Engineers (SAE)
Safari (GMC)
2.2-liter, false ABS codes (1996), Oct:23
4.3-liter, poor power (1995), Nov:12, 14-15
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Safety
air quality and ventilation, Jan:32
electrical hazards, Jan:32
eye protection, Jan:28
hand and skin care, Jan:28-29
Hazardous Materials and Shop Safety, Oct:43-46
noise reduction, Jan:29-30
posting and filing Material Safety Data Sheets (MSDS), Jan:32-33
slip protection, Jan:29
strain-related injury protection, Jan:30
Safety-Kleen
Introduction to Regulatory Compliance: A Guide to OSHA, EPA and DOT Regulations kit, Jan:69
partnership with Church & Dwight, Jun:65
safety and environmental contact information, Jan:34
Savana (GMC), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Schley Products
Toyota Timing Belt Tensioner Compressor, 1998 Top 20 Tools, Sep:42, 44
universal hose pliers, Mar:110-111
Sebring (Chrysler)
2.0-liter
MIL on with multiple driveability symptoms (before 1994), Jul:74
2.0/2.5-liter, ticking noise from engine compartment (1995-96), May:83
2.4-liter, timing belt service (1996), Oct:22-23
SEM Products, new automotive coating products, Aug:67
SEMA. *See* Specialty Equipment Market Association (SEMA)
Sensor
eddy current, Jan:18, 19-20
magnetostriction, Jan:18, 19-20
Mercedes, yaw rate, Jan:20
Service Slants
2.5TL (Acura)
miscellaneous troubleshooting tips (1995-96), Dec:61, 63
stuck ignition key (1995-96), Jul:76
3-series (BMW), 2.5-liter, A/C belt tensioner noise (1992 and on), Apr:65
3.2TL (Acura)
miscellaneous troubleshooting tips (1995-96), Dec:61, 63
stuck ignition key (1995-96), Jul:76
4WD pickup (Nissan), front-end service upgrade (1989-90), Mar:109
5-series (BMW), 2.5-liter, A/C belt tensioner noise (1992 and on), Apr:65
80 (Audi), leaking brake master cylinder (1988-92), Jul:71
90 (Audi), leaking brake master cylinder (1988-92), Jul:71
100 (Audi)
inaccurate fuel gauge, bad ground (1993-95), May:84
leaking brake master cylinder (1988-92), Jul:71
R-134a system capacity (1992 on), Jun:59-60
240 (Volvo), dropping idle when A/C comes on (1991-94), Feb:86
240 DL/GL/GLT/GT (Volvo), 2.3-liter, shift lever rattle, Jan:67
240SX (Nissan), clutch bleeding (1991-93), Dec:60
300ZX (Nissan)
heater gurgle (1989), Jan:63
pinging in 5th gear (1990-92), Aug:66
318i (BMW)
delayed gear engagement, Oct:24
front-end play (before 1993), May:85
transmission DTC 40 (up to 1993), Mar:104
318iS (BMW), front-end play (before 1993), May:85
318Ti (BMW), Noisy A/C (1996), Apr:60
323 (Mazda), erratic overdrive operation (1989), Mar:109
325i (BMW)
delayed gear engagement, Oct:24
front-end play (before 1993), May:85
transmission DTC 40 (up to 1993), Mar:104
325iS (BMW), front-end play (before 1993), May:85
328i (BMW)
2.8-liter, coolant leak from throttle bore (1997), Dec:63
MIL on with DTCs set (1996 on), Nov:83
525i (BMW)
delayed gear engagement, Oct:24
transmission DTC 40 (up to 1993), Mar:104
528i (BMW), MIL on with DTCs set (1996 on), Nov:83
530i (BMW)
transmission DTC 40 (up to 1993), Mar:104
transmission leaks, Feb:80
updated engine management software (up to 1995), Sep:83-84
540i (BMW)
transmission DTC 40 (up to 1993), Mar:104
transmission leaks, Feb:80
updated engine management software (up to 1995), Sep:83-84
626 (Mazda), front strut squeak (1993-96), Jul:76
700 (Volvo), distributor oil leak, Mar:104
740i (BMW)
transmission leaks, Feb:80
updated engine management software (up to 1995), Sep:83-84
740iL (BMW), updated engine management software (up to 1995), Sep:83-84
750iL (BMW), intermittent stall (1989), Jan:63
840Ci (BMW), updated engine management software (up to 1995), Sep:83-84
850 (Volvo)
belt noise (1992-93), Apr:65
can't get out of "Park" (1994-96), Sep:82-83
intermittent jerking, flashing MIL (1994-96), Jun:59
power steering chatter (1995), Oct:26
revised torque specs (1992 on), Jul:71
900 (Saab)
driveline vibration (1993-94), Feb:86
excessive oil consumption (1989), Feb:84
fan runs continuously, dead battery (1989-93), Nov:81
front end vibration (1994), Sep:82
hard cold starting (1989), Jan:66
too many dead batteries (1994-95), Aug:62, 64
weird electrical gremlins (1989-93), Oct:24
911 Carrera (Porsche)
fuel odor (all years), Aug:62
smoke on start up (1995), Feb:80
911 Carrera 2 (Porsche)
knocking noise in steering (1992-93), Jan:64
power steering noises (1992-94), Oct:40
refrigerant loss (1989-94), Oct:24
911 Carrera 4 (Porsche)
knocking noise in steering (1992-93), Jan:64
power steering noises (1992-94), Oct:40
refrigerant loss (1989-94), Oct:24
911 Carrera Turbo (Porsche)
fuel odor (1991 on), Aug:62
knocking noise in steering (1992-93), Jan:64
911 Turbo (Porsche)
power steering noises (1992-94), Oct:40
refrigerant loss (1991-92), Oct:24
smoke on start up (1995), Feb:80
940 (Volvo), poor A/C performance (1992-95), Nov:80
944 S2 (Porsche)
funny camshaft noise (1989-91), Jan:67
lumpy idle, hesitation (1989-91), Mar:104
960 (Volvo)
can't get out of "Park" (1994-96), Sep:82-83
rampant ECM (1995), Jun:62
968 (Porsche)
Hall sensor DTC stored (1992-93), May:82-83
lumpy idle, hesitation (1992-94), Mar:104
new door switch, glove box light (1992-94), Apr:65
noise and/or vibration from rear of vehicle (1992-93), Jun:59
oil warning light on (1993-94), Jul:71
9000 (Saab)
excessive oil consumption (1989), Feb:84
blown power window fuses (1992-93), May:83
broken ACC blower control or manual blower resistor (1992-95), Oct:42
fan runs continuously, dead battery (1989-93), Nov:81
MIL on with DTCs stored in memory (1988-92), Mar:108
winking ABS warning light (1991), Mar:104
9000 CDE (Saab), poor throttle response (1995), Jul:71
A4 (Audi)
2.8-liter, exhaust leak? (1992 on), Sep:83
ABS light on (1996 on), Nov:83
tach reads too high (1996), Jan:64
A6 (Audi)
2.8-liter, knock sensor terminal corrections (1996), Dec:58
ABS light on (1996 on), Nov:83
inaccurate fuel gauge, bad ground (1993-95), May:83
R-134a system capacity (1992 on), Jun:59-60
A6 Quattro (Audi), differential noise (1995), Mar:105
Accent (Hyundai), tapping noise at passenger firewall (1995-96), Jul:72
Acclaim (Plymouth)
cruise control characteristics (1989-95), Nov:81-82
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
Accord (Honda)
clutch judder (1994-96), Dec:60
fuel gauge won't go to "F" (1994-95), Jul:72
pinholes in A/C Compressor (1994-97), Apr:60
sticky fuel gauge (1990), Feb:86
Achieva (Oldsmobile), growling/grinding noise in "Park" on incline (1992-95), Dec:66
Acura, poor A/C performance (1994 on), Apr:60
Aerostar (Ford)
2.3-liter, warbling noise from engine compartment (1986), Jan:66
fuel pump electrical noise (1986-96), Nov:78-79
all vehicles, head gasket positioning, Jul:74, 76
Allante (Cadillac)
4.6-liter , long crank times following cold soak (1993), Jan:63
new design front-wheel-drive hub (1992-93), Sep:80
Altima (Nissan), too-cool heat (1993-95), Oct:36-37
Astro (Chevrolet)
2.2-liter, false ABS codes (1996), Oct:23
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Audi
delayed shifts during warmup, Aug:65
new engine coolant, Oct:37-40
Aurora (Oldsmobile), new design front-wheel-drive hub (1995), Sep:80
Avenger (Dodge)
2.0-liter, MIL on with multiple driveability symptoms (before 1994), Jul:74
2.0/2.5-liter, ticking noise from engine compartment (1996), May:83
B-Series pickup (Mazda), noisy front axle (1994), Oct:26
Beretta (Chevrolet)
2.2-liter, stalling, rough running, no-starts code 42 (1990-91), Apr:58
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Blazer (Chevrolet), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
BMW
poor shift quality, Jun:62
replacing shock absorbers, Jul:73
self-activating flashers (1993), Jan:66
serious internal engine degradation (1990), Jun:60
Bonneville (Pontiac)
A/C system thump (1995-97), Dec:64
ABS/traction warning light on (1995), Jun:60-62
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Bravada (Oldsmobile)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
4.3/5.0/5.7-liter, improper EGR valve installation (1993-94, 1996), Feb:84
Breeze (Plymouth), 2.4-liter, timing belt service (1996), Oct:22-23
Bronco (Ford)
electrical glitches (1994-96), Dec:66
fuel pump electrical noise (1989-96), Nov:78-79
updated trans center support (1989-1994), Jun:60
worn out belt tensioner (1993-95), Nov:83
Bronco II (Ford), fuel pump electrical

noise (1989-90), Nov:78-79
C280 (Mercedes Benz)
high idle (1995 and before), Jun:62
high idle speed after cold start (up to 1995), Jul:73-74
C/K pickup (Chevrolet)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
C/K pickup (GMC)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
C/K sport/ute (Chevrolet), 4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
C/K sport/ute (GMC), 4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
Cabrio (Volkswagen)
2.0-liter, hesitation, loss of power (1994), Feb:84-85
inadequate A/C (1993 on), Jul:71
Camaro (Chevrolet)
3.4-liter, start and stall (1994-95), Jun:58
5.7-liter, chuggle or surge (1993), Mar:104
5.7-liter, power steering goes away (1993), Aug:60, 62
poor A/C performance (1994-95), May:83
Camry (Toyota)
3.0-liter, engine knock with A/C on (1989-91), Jan:65
new trunk torsion rods (1992-96), Apr:64
Capri (Mercury), fuel pump electrical noise (1986), Nov:78-79
Caprice (Chevrolet), 4.3/5.0/5.7-liter, engine noise (1994-96), Sep:84, 84
Car Care Parts, tips for dealing with blown gaskets and fried clutches on common A/C compressors, Apr:63
Caravan (Dodge)
2.4-liter, timing belt service (1996), Oct:22-23
cruise control characteristics (1989 on), Nov:81-82
intermittent sliding door power locks (1996), Jan:64
radar-jamming driveability (1996), Feb:84
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
Cavalier (Chevrolet)
2.2-liter, revised coolant fill procedure (1996), Feb:79
growling/grinding noise in "Park" on incline (1992-95), Dec:66
loud knocking on rough roads (1995-96), Jul:72
Century (Buick)
cold stall, hesitation, rough idle (1994-95), Mar:105
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Cherokee (Jeep)
grinding/scraping noise (1993-97), Jul:71
normal startup noises (1996), Feb:85
software flash updates (1996), Dec:64
Ciera (Oldsmobile), growling/grinding noise in "Park" on incline (1992-95), Dec:66
Cirrus (Dodge)
2.4-liter. timing belt service (1996), Oct:22-23
cruise control characteristics (1993 on), Nov:81-82
gauges go to zero (1995), Jul:70-71
inconsistent wiper delay, no right turn signal cancel (1995), Dec:61
intermittent electrical gremlins (1995), Aug:65
radio/clock display goes blank (1995), Sep:82
Civic (Honda), pinholes in A/C compressor (1994-97), Apr:60
Concorde (Chrysler)
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1993 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
Continental (Lincoln)
4.6-liter, intermittent no-start (1995-97), Aug:62
broken trunk pull-down (1988-94), Oct:23
clicking noise in reverse (1995-96), Apr:60
contaminated fuel tank (1993-94), May:84
fuel pump electrical noise (1988-94), Nov:78-79
Contour (Ford)
2.5-liter, engine noise on startup (1995), Jan:62-63
2.5-liter, no power on takeoff (1995), Jun:62
2.5-liter, water pump squeal (1995-96), Sep:80, 82
lots of codes, no driveability problem (1996), Jul:71
Cordia (Mitsubishi), transaxle service (1989-90), Mar:109
Corrado (Volkswagen)
inadequate A/C (1993 on), Jul:71
intermittent no-starts (1990-95), Sep:83
weird engine noise when warm (1990-93), Jan:63-63
Corsica (Chevrolet)
2.2-liter, stalling, rough running, no-starts code 42 (1990-91), Apr:58
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Cougar (Mercury)
2.3-liter, warbling noise from engine compartment (1985), Jan:66
fuel pump electrical noise (1985-96), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
power steering leak (1996), Aug:64
Crown Victoria (Ford)
4.6-liter, cold-start engine noise (1993-96), Oct:40
4.6-liter, manufacturing differences (1996 and on), May:81-82
fuel pump electrical noise (1986-94), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Cutlass (Oldsmobile)
Cierra, cold stall, hesitation, rough idle (1994-95), Mar:105
composite leaf spring helpers (1988-93), Jul:70
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Cutlass Supreme (Oldsmobile)
3.4-liter, MIL on with DTC 1403 (1994-95), Jun:62
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Dakota (Dodge)
normal startup noises (1996), Feb:85
software flash updates (1996), Dec:64
transmission temperature sensor incompatability (1995), Nov:79
wheel runout (1994-95), Oct:25
Daytona (Dodge), cruise control characteristics (1989-93), Nov:81-82
Defender (Land Rover)
defective timing gear (1995-96), Dec:64
no start in cold weather (1993-95), Jan:65
spark plug update (1987 on), Dec:60
del Sol (Honda), pinholes in A/C Compressor (1994-95), Apr:60
DeVille (Cadillac), new design front-wheel-drive hub (1992-95), Sep:80
DeVille Concours (Cadillac)
4.6-liter, long crank times following cold soak (1994-95), Jan:63
new design front-wheel-drive hub (1992-95), Sep:80
Diamante (Mitsubishi), MIL on with DTDC 31 stored (1993), Oct:40, 42
Discovery (Land Rover)
defective timing gear (1995-96), Dec:64
inoperative tach/hard starting (1995 and before), Oct:26
no start in cold weather (1994-95), Jan:65
spark plug update (1987 on), Dec:60
transfer case whine (1994-95), Apr:61
Dynasty (Dodge), cruise control characteristics (1989-93), Nov:81-82
E320 (Mercedes Benz)
high idle (1995 and before), Jun:62
high idle speed after cold start (up to 1995), Jul:73-74
Eclipse (Mitsubishi), 1.8-liter, rough idle, stalling (1990-94), Jan:65
Econoline (Ford)
5.8-liter, stall during extended idle (1996), Jul:70
7.3-liter, hesitation, rough idle, poor performance (1995), Feb:79-80
fuel pump electrical noise (1989-96), Nov:78-79
updated trans center support (1989-1994), Jun:60
worn out belt tensioner (1993-95), Nov:83
Eighty Eight (Oldsmobile)
A/C system thump (1995-97), Dec:64
ABS/traction warning light on (1995), Jun:60-62
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Elantra (Hyundai)
new engine specs (1996-97), Oct:40
tapping noise at passenger firewall (1996), Jul:72
Eldorado (Cadillac)
4.6-liter, long crank times following cold soak (1993-95), Jan:63
ignition key binds (1992-95), May:82
new design front-wheel-drive hub (1992-95), Sep:80
ES 300 (Lexus), hard restarting (1993 and before), Oct:26
Escort (Ford)
brake noise under 35 mph (1991-96), Feb:86
fuel pump electrical noise (1987-96), Nov:78-79
Explorer (Ford)
electrical glitches (1993-96), Dec:66
fuel pump electrical noise (1991-96), Nov:78-79
grabbing brakes (1991-94), Oct:25-26
lots of codes, no driveability problem (1996), Jul:71
vibration and shake (1991-94), Jul:73
Express (Chevrolet), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
F-150 (Ford)
fuel pump electrical noise (1989-96), Nov:78-79
lots of codes, no driveability problem (1997), Jul:71
updated trans center support (1989-1994), Jun:60
F-250 (Ford)
7.3-liter, hesitation, rough idle, poor performance (1994-95), Feb:79-80
acceleration vibration (1988-94), Dec:61
F-350 (Ford)
7.3-liter, hesitation, rough idle, poor performance (1994-95), Feb:79-80
fuel pump electrical noise (1989-96), Nov:78-79
updated trans center support (1989-1994), Jun:60
F-series truck (Ford), worn out belt tensioner (1993-95), Nov:83
F-Super Duty (Ford)
7.3-liter, hesitation, rough idle, poor performance (1994-95), Feb:79-80
fuel pump electrical noise (1989-96), Nov:78-79
updated trans center support (1989-1994), Jun:60
Firebird (Pontiac)
3.4-liter, start and stall (1994-95), Jun:58
5.7-liter, chuggle or surge (1993), Mar:104
5.7-liter, power steering goes away (1993), Aug:60, 62
poor A/C performance (1994-95), May:83
Fleetwood (Cadillac)
4.3-liter, engine noise (1994-96), Sep:84
4.3/5.0/5.7-liter, engine noise (1994-96), Sep:84
new design front-wheel-drive hub (1992-95), Sep:80
Fleetwood Concours (Cadillac), new design front-wheel-drive hub (1992-95), Sep:80
Ford Motor Company
3.8-liter, mild squeak, chirp or knock in engine, Feb:80, 82
A/C dies a black death, Sep:84, 86
A/C service tips (1996 and on), Feb:83
hard start/long crank (1995-96), Dec:64
Ford torque converter shudder, correction to April column, May:85
G-body van (Chevrolet)
2.2-liter, false ABS codes (1996), Oct:23
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
G-body van (GMC)
2.2-liter, false ABS codes (1996), Oct:23
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
Galant (Mitsubishi), transaxle service (1989-90), Mar:109
General Motors Corp.
A/C accumulator fittings, Apr:64
A/C compressor sealing washer, Oct:35-37
headlight lens distortion, Nov:80
overheating (1990 on), Dec:58
snapping noise in engine compartment, Nov:82-83
unnecessary alternator replacement (1990-95), Oct:40
Golf (Volkswagen)
2.0-liter, hesitation, loss of power (1994), Feb:84-85
hard starting (late 80s), Oct:25
intermittent instrument lighting (1995), Mar:109
noise in engine compartment (1993-95), Aug:62
pops out of gear (1996-97), Jul:77
Golf III (Volkswagen)
inadequate A/C (1993 on), Jul:71
oil in air cleaner (1993-96), Dec:60
Grand Am (Pontiac), growling/grinding noise in "Park" on incline (1992-95), Dec:66
Grand Cherokee (Jeep)
4.0-liter, bog under load (1995), Feb:83
4.0-liter, false MIL codes (1997), Jun:58
key-off battery drain (1996), Jul:76
mode lever moves to defrost on acceleration (1993-96), Apr:61
software flash updates (1996), Dec:64
Grand Marquis (Mercury)
4.6-liter, cold-start engine noise (1993-96), Oct:40
4.6-liter, manufacturing differences (1996 and on), May:81-82
fuel pump electrical noise (1986-94), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Grand Prix (Pontiac)
3.4-liter, MIL on with DTC 1403 (1994-95), Jun:62
composite leaf spring helpers (1988-93), Jul:70
growling/grinding noise in "Park" on incline (1992-95), Dec:66
GTI (Volkswagen)
intermittent instrument lighting (1995), Mar:109
noise in engine compartment (1993-95), Aug:62
GTI VR6 GLX (Volkswagen), 2.8-liter, long cranking times (1995), Jun:59
Honda, noisy rear wheel bearings (1990-97), Nov:84
I30 (Infiniti), radio noise, Oct:37
Impala SS (Chevrolet)
4.3-liter, engine noise (1994-96), Sep:84
5.7-liter, engine noise (1994-96), Sep:84
Imperial (Chrysler), cruise control

1998 Motor Magazine Index

characteristics (1990-93), Nov:81-82
Infiniti, cooling fan installation, Nov:84
Integra (Acura), oil leaks (1990), Feb:82
Intrepid (Dodge)
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1993 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
Isuzu, propylene glycol recommendation, Jul:76
Jaguar, 4.0-liter, A/C switch location change (1993-94), Jun:59
Jetta (Volkswagen)
2.0-liter, hesitation, loss of power (1994), Feb:84-85
hard starting (late 80s), Oct:25
intermittent instrument lighting (1995), Mar:109
noise in engine compartment (1993-95), Aug:62
pops out of gear (1996-97), Jul:77
Jetta GLX (Volkswagen)
2.8-liter, long cranking times (1995), Jun:59
inadequate A/C (1993 on), Jul:71
intermittent instrument lighting (1995), Mar:109
Jetta III (Volkswagen)
inadequate A/C (1993 on), Jul:71
oil in air cleaner (1993-96), Dec:60
Jimmy (GMC), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Land Cruiser (Toyota), transfer case lever noise (1994), Jan:67
Land Rover
MAF sensor terminal care, May:85
no start in cold weather (1993-95), Jan:65
LeBaron (Chrysler)
cruise control characteristics (1989-95), Nov:81-82
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
Legacy (Subaru)
2.2-liter, engine oil seepage (up to 1991), Mar:109
engine stumble with A/C on (1993), Oct:23-24
oil pump leak (1995), Feb:85
suspension noise (1990), Jan:65-66
various DTCs (1995), Nov:80-81
LeSabre (Buick)
A/C system thump (1995-97), Dec:64
ABS/traction warning light on (1995), Jun:60-62
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Lexus, steering gear/steering wheel service tips, Dec:64
LHS (Chrysler)
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1993 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
LSS (Oldsmobile), A/C system thump (1996-97), Dec:64
Lumina (Chevrolet)
3.4-liter, MIL on with DTC 1403 (1994-95), Jun:62
composite leaf spring helpers (1988-93), Jul:70
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Lumina APV (Chevrolet)
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
M/L minivan (Chevrolet)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
poor A/C performance (1994-95), May:83
M/L minivan (GMC)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
poor A/C performance (1994-95), May:85
Mark VIII (Lincoln)
4.6-liter, cold-start engine noise (1993-96), Oct:40
fuel pump electrical noise (1986-92), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Maxima (Nissan)
clutch chatter (1989-92), Sep:87
coolant leak (1989-94), Dec:64, 66
heater gurgle (1989), Jan:63
Mercedes Benz, water pump drainage tube retrofit (before 1992), May:83
Merkur (Mercury), 2.3-liter, warbling noise from engine compartment (1985-89), Jan:66
Mirage (Mitsubishi)
1.5-liter, rough idle, stalling (1990-94), Jan:65
transaxle service (1989-90), Mar:109
MPV (Mazda), flashing defogger light, Dec:60
Mustang (Ford)
2.3-liter, warbling noise from engine compartment (1985-92), Jan:66
4.6-liter, cold-start engine noise (1993-96), Oct:40
fuel pump electrical noise (1986-96), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Mustang GT (Ford), 5.0-liter, growling clutch (1994), Dec:58
MX-6 (Mazda), front strut squeak (1993-96), Jul:76
Mystique (Mercury)
2.5-liter, engine noise on startup (1995), Jan:62-63
2.5-liter, no power on takeoff (1995), Jun:62
2.5-liter, water pump squeal (1995-96), Sep:80, 82
lots of codes, no driveability problem (1996), Jul:71
Neon (Dodge)
cruise control surges or doesn't work (1995), Jun:60
front suspension popping noise (1995), Sep:86
misrouted engine harness (1996), Feb:79
Neon (Plymouth), front suspension popping noise (1995), Sep:86
New Yorker (Chrysler)
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1989 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
New Yorker Salon (Chrysler), cruise control characteristics (1989-93), Nov:81-82
Ninety Eight (Oldsmobile)
ABS/traction warning light on (1995), Jun:60-62
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Nissan, correct oil level and grade, Apr:64
P-body truck (Chevrolet)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
P-body truck (GMC)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
7.4-liter, miss, rough idle, burning oil (1995), Feb:82-83
Park Avenue (Buick)
A/C system thump (1995-97), Dec:64
ABS/traction warning light on (1995), Jun:60-62
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Paseo (Toyota), steering column knock (1994), Oct:26
Passat (Volkswagen)
2.0-liter, intermittent no-starts (1990-95), Sep:83
2.8-liter, intermittent no-starts (1990-95), Sep:83
inadequate A/C (1993 on), Jul:71
pops out of gear (1996-97), Jul:77
service manual corrections (1995 on), Dec:66
Passat GLX (Volkswagen), 2.8-liter, long cranking times (1995), Jun:59
Pathfinder (Nissan)
3.0-liter, engine replacement (1995-96), Jul:73
coolant leak (1990-95), Dec:64, 66
front-end service upgrade (1989-90), Mar:109
hard or no start (1990-95), Nov:80
rough idle, no power, Oct:24
V6, heater gurgle (1989), Jan:63
pickup (Chevrolet), 2.2-liter, false ABS codes (1996), Oct:23
pickup (GMC), 2.2-liter, false ABS codes (1996), Oct:23
Pickup (Isuzu), 4ZD1/4ZE1 engine, idle vibration (1990-1991), Mar:108
Pickup (Nissan), V6, heater gurgle (1989), Jan:63
pickup (Toyota), squealing clutch (1990), Oct:42
Porsche
2.7-liter, coolant in the oil (1987-89), Dec:60
5.0-liter, coolant in the oil (1987-89), Dec:60
Precis (Mitsubishi), transaxle whine (1990-93), Oct:24
Probe (Ford)
fuel pump electrical noise (1989-92), Nov:78-79
Rough idle, miss (1994), Jun:58-59
Protege (Mazda), exhaust noise (1995-96), Nov:81
Quest (Nissan)
3.0-liter, engine replacement (1995-96), Jul:73
coolant leak (1993-95), Dec:64, 66
steering groans (1993), Feb:83-84
tranny whine (1993-94), Jun:62
R-134a conversion or retrofits, high-pressure shutoff switch, May:83
Ram cab & chassis (Dodge), rear brake wear (1989-93), May:82
Ram pickup (Dodge)
3.9-liter, engine surge on the road (1994-95), Apr:58, 60
mode lever moves to defrost on acceleration (1994-96), Apr:61
normal startup noises (1996), Feb:85
rear brake wear (1989-93), May:82
replacing lower ball joints (1994-96), May:85
self-sustaining steering shimmy (1994-96), Mar:102, 104
software flash updates (1996), Dec:64
TCC shudder (1994-95), Jul:74
wheel runout (1994-95), Oct:25
Ram truck (Dodge), brake squeal, Aug:62
Ram van/wagon (Dodge)
normal startup noises (1996), Feb:85
rear brake wear (1993-95), May:82
software flash updates (1996), Dec:64
wheel runout (1994-95), Oct:25
Range Rover (Land Rover)
3.9-liter, spark plug update (1987 on), Dec:60
4.0-liter, height sensor DTCs, Jun:59
4.2-liter, spark plug update (1987 on), Dec:60
defective timing gear (1995-96), Dec:64
Range Rover County (Land Rover), inoperative tach/hard starting (1995 and before), Oct:26
Ranger (Ford)
2.3-liter, warbling noise from engine compartment (1985-92), Jan:66
4.0-liter, lumpy idle (1994), Mar:104
fuel pump electrical noise (1989-96), Nov:78-79
grabbing brakes (1983-97), Oct:25-26
lots of codes, no driveability problem (1996), Jul:71
Regal (Buick)
composite leaf spring helpers (1988-93), Jul:70
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
Regency (Oldsmobile), A/C system thump (1997), Dec:64
Riviera (Buick)
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-93), Dec:66
new design front-wheel-drive hub (1992-93, 1995), Sep:80
Roadmaster (Buick), 4.3/5.7-liter, engine noise (1994-96), Sep:84
Rodeo (Isuzu), 3.2-liter, replacing valve covers, Dec:60
S4 (Audi), R-134a system capacity (1992 on), Jun:59-60
S6 (Audi), R-134a system capacity (1992 on), Jun:59-60
S320 (Mercedes Benz)
high idle (1995 and before), Jun:62
high idle speed after cold start (up to 1995), Jul:73-74
S-10 (Chevrolet), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84-85
S/T pickup (Chevrolet)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
S/T pickup (GMC)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
S/T sport/ute (Chevrolet)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
S/T sport/ute (GMC)
4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
hard starting, rough running (1992-95), Jan:64
Sable (Mercury)
clicking noise in reverse (1994-96), Apr:60
contaminated fuel tank (1993-94), May:84
fuel pump electrical noise (1986-95), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Safari (GMC)
2.2-liter, false ABS codes (1996), Oct:23
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Savana (GMC), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Sebring (Chrysler)
2.0-liter, MIL on with multiple driveability symptoms (before 1994), Jul:74
2.5-liter, ticking noise from engine compartment (1995-96), May:83
2.5-liter, timing belt service (1996), Oct:22-23
Seville (Cadillac)
4.6-liter, long crank times following cold soak (1993-95), Jan:63
ignition key binds (1992-95), May:82
new design front-wheel-drive hub (1992-95), Sep:80
Shadow (Dodge), cruise control characteristics (1989-94), Nov:81-82
Sidekick (Suzuki)
noisy front wheel spindles (before 1996), Sep:87
rear brake squeal (1989-90), Feb:85-86
Sidekick Sport (Suzuki), noisy front wheel spindles (before 1996), Sep:87
Sierra (GMC), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84

1998 Motor Magazine Index

Sigma (Mitsubishi), transaxle service (1989-90), Mar:109
Silhouette (Oldsmobile)
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Skylark (Buick), growling/grinding noise in "Park" on incline (1992-95), Dec:66
SL320 (Mercedes Benz)
high idle (1995 and before), Jun:62
high idle speed after cold start (up to 1995), Jul:73-74
Sonata (Hyundai), persistent MIL illumination (1993), Mar:108
Sonoma (GMC), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Spirit (Dodge)
cruise control characteristics (1989-95), Nov:81-82
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
Stanza (Nissan), clutch chatter (1990-92), Sep:87
Stratus (Dodge)
2.4-liter, timing belt service (1996), Oct:22-23
cruise control characteristics (1993 on), Nov:81-82
gauges go to zero (1995), Jul:70-71
inconsistent wiper delay, no right turn signal cancel (1995), Dec:61
intermittent electrical gremlins (1995), Aug:65
radio/clock display goes blank (1995), Sep:82
Subaru
Check Engine (ECS) light on (1983-86), Jun:60
flickering warning lights, Aug:66
Suburban (Chevrolet), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Suburban (GMC), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Sunbird (Pontiac)
2.2-liter, revised coolant fill procedure (1996), Feb:79
growling/grinding noise in "Park" on incline (1992-94), Dec:66
Sundance (Plymouth), cruise control characteristics (1989-94), Nov:81-82
Sunfire (Pontiac)
growling/grinding noise in "Park" on incline (1995), Dec:66
loud knocking on rough roads (1995-96), Jul:72
SUV (Chevrolet), 2.2-liter, false ABS codes (1996), Oct:23
SUV (GMC), 2.2-liter, false ABS codes (1996), Oct:23
Swift (Suzuki), funky idle speed (1993), Jan:66-67
Tahoe (Chevrolet)
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
rear suspension bottoms out (1995-96), Jul:74
Talon (Eagle)
2.0-liter, MIL on with multiple driveability symptoms (before 1994), Jul:74
2.0/2.5-liter, ticking noise from engine compartment (1996), May:83
fuel gauge reads wrong (1995-96), Oct:35
Taurus (Ford)
clicking noise in reverse (1994-96), Apr:60
contaminated fuel tank (1993-94), May:84
fuel pump electrical noise (1986-95), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Tempo (Ford), fuel pump electrical noise (1988-94), Nov:78-79
Tercel (Toyota), steering column knock (1994), Oct:26
Thunderbird (Ford)
2.3-liter, warbling noise from engine compartment (1985-88), Jan:66
4.6-liter, cold-start engine noise (1993-96), Oct:40
fuel pump electrical noise (1985-96), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
power steering leak (1996), Aug:64
Tiburon (Hyundai), new engine specs (1997), Oct:40
Topaz (Mercury), fuel pump electrical noise (1988-94), Nov:78-79
Toronado (Oldsmobile)
growling/grinding noise in "Park" on incline (1992), Dec:66
new design front-wheel-drive hub (1992), Sep:80
Town & Country (Chrysler)
2.4-liter, timing belt service (1996), Oct:22-23
cruise control characteristics (1989 on), Nov:81-82
intermittent sliding door power locks (1996), Jan:64
radar-jamming driveabilty (1996), Feb:84
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
Town Car (Lincoln)
4.6-liter, cold-start engine noise (1993-96), Oct:40
broken trunk pull-down (1988-96), Oct:23
fuel pump electrical noise (1986-94), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Toyota, harsh shifts, Sep:86
Tracer (Mercury)
brake noise under 35 mph (1991-96), Feb:86
fuel pump electrical noise (1991-96), Nov:78-79
Tracker (Geo)
no 4WD low gear (1995), Nov:83
torque converter clutch chuggle (1989-95), Jul:74
Trans Sport (Pontiac)
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Tredia (Mitsubishi), transaxle service (1989-90), Mar:109
Trofeo (Oldsmobile), new design front-wheel-drive hub (1992), Sep:80
Trooper (Isuzu), 3.2-liter, replacing valve covers, Dec:60
Truck (Nissan)
3.0-liter, engine replacement (1995-96), Jul:73
coolant leak (1990-95), Dec:64, 66
Van (Nissan), rough idle, no power, Oct:24
Vanagon (Volkswagen), defective ignition coil (1989), Jan:66
vehicles with belt-driven fans, choosing the right fan clutch Aug:65-66
vehicles with fusible links, size differences, Jul:76
vehicles with hydraulic brakes, understanding brake fluid, Aug:64-65 correction to, Sep:102
vehicles with OBD II, contaminated oxygen sensors, Oct:35
vehicles with R-134a refrigerant systems, tips for dealing with, Apr:62-63
vehicles with retrofit R-134a A/C systems, auxiliary cooling fans, Sep:86-87
Villager (Mercury)
3.0-liter, engine replacement (1995-96), Jul:73
fuel pump electrical noise (1993-96), Nov:78-79
Vision (Plymouth)
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1993 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
Volkswagen
2.8-liter, wrong DTC, Feb:80
new coolant, Oct:35
oil quantity change, Nov:80
poor driveability (1980 on), Mar:104
poor grounds, May:73
Voyager (Plymouth)
2.4-liter, timing belt service (1996), Oct:22-23
cruise control characteristics (1989 on), Nov:81-82
intermittent sliding door power locks (1996), Jan:64
radar-jamming driveabilty (1996), Feb:84
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
W4 truck (Chevrolet), 4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
W4 truck (GMC), 4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
W-cars (General Motors), 3.4-liter, MIL on with DTC 1403 (1994-95), Jun:62
Windstar (Ford)
3.8-liter, PCM compatibility (1995), Jan:64-65
front end noises (1995-97), Mar:107-108
lots of codes, no driveability problem (1996), Jul:71
Wrangler (Jeep), software flash updates (1997), Dec:64
X-90 (Suzuki), noisy front wheel spindles (before 1996), Sep:87
XJ6 (Jaguar)
4.0-liter, engine vibration, Feb:80
4.0-liter, MIL on with code(s) set (1995), Jan:64
engine knock (1995), Mar:104
power seat fuses blow (1995), Jan:66
sticky throttle (1995-96), Jul:76-77
XJ8 (Jaguar), battery disconnect procedures (1998 on), Dec:63
XJ12 (Jaguar)
engine knock (1995), Mar:104
power seat fuses blow (1995), Jan:66
XJR (Jaguar)
4.0-liter, engine vibration, Feb:80
4.0-liter, MIL on with code(s) set (1995), Jan:64
engine knock (1995), Mar:104
power seat fuses blow (1995), Jan:66
XJS (Jaguar), 4.0-liter, MIL on with code(s) set (1995), Jan:64
XK8 (Jaguar)
battery disconnect procedures (1997 on), Dec:63
safety recall (1997), Nov:84
XR4Ti (Mercury), 2.3-liter, warbling noise from engine compartment (1985-89), Jan:66
Yukon (GMC)
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
rear suspension bottoms out (1995-96), Jul:74
Service Technicians Society (STS)
Heavy Duty Council planned, Dec:68
president named, Apr:53
Scan Tool Shootout, Sep:2
update, Nov:75-77
web site address, Aug:67
Seville (Cadillac)
4.6-liter, long crank times following cold soak (1993-95), Jan:63
ignition key binds (1992-95), May:82
new design front-wheel-drive hub (1992-95), Sep:80
Shadow (Dodge), cruise control characteristics (1989-94), Nov:81-82
Shop Management
advertising and marketing, Jun:47-50
All Pro/Bumper To Bumper, marketing brochure, Apr:73
Automotive Parts Rebuilders Association (APRA)
Business Planning and Strategy video, Mar:116
Inventory Management video, Mar:116
Marketing Without Money video, Mar:116
CARS, *Shop Management Tools For Success*, Feb:97, Apr:74, May:95, Jun:73, Jul:93, Aug:75, Dec:75
creating a business plan, Aug:49-52
Employee Relations, Dec:47-50
environmental concerns, Jan:33-34
equipment checklist, Nov:57-60
Hazardous Materials and Shop Safety, Oct:43-46
maintaining a safe workplace, Jan:28-30, 32-34
maintaining your shop equipment, Nov:53-56
MOTOR/ALLDATA
computerizing the shop, Mar:113-114
system assessment, Jan:54-56
OE scheduled maintenance, Jan:36-37
Planning For Success, Nov:49-61
shop policies in writing, Feb:65-68
vehicle history data and service writing, Jan:37
Shure Manufacturing Corp., tear-down transmission bench, Nov:73
Sidekick (Suzuki)
noisy front wheel spindles (before 1996), Sep:87
rear brake squeal (1989-90), Feb:85-86
Sidekick Sport (Suzuki), noisy front wheel spindles (before 1996), Sep:87
Siemens Corp.
diesel engine catalytic converter module, Mar:100
SINOx diesel system, May:19-20
Sierra (GMC)
4.3-liter
1999 tech preview, Sep:51-52
tech preview of 1998 model, Sep:51-52
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Sigma (Mitsubishi), transaxle service (1989-90), Mar:109
Signia (Buick), 10th North American International Auto Show (NAIAS), Jan:75-76
Silhouette (Oldsmobile)
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Silverado (Chevrolet), 4.3-liter, 1999 tech preview, Sep:51-52
SINOx diesel system, Siemens, May:19-20
SK Hand Tools, 3/8-inch drive impact sockets, Mar:112, Jul:82
Skylark (Buick), growling/grinding noise in "Park" on incline (1992-95), Dec:66
SL320 (Mercedes Benz)
high idle (1995 and before), Jun:62
high idle speed after cold start (up to 1995), Jul:73-74
Snap-On Diagnostics
Import Transmission Troubleshooter Cartridge, Mar:110
Integrity VIP used vehicle certification system, Jan:59
named 1997 supplier of the year, Jun:66
Scanlines free technical tips newsletter, Apr:74
Snap-On Tools
agreement with Harley Davidson, Jul:86
entry-level generic scan tool, Oct:19
ERGOPALM2 3/8-inch ratchet, Sep:90, Oct:B23
FAR720 3/8-inch drive air ratchet, Apr:67
infrared thermometers, Dec:71
MT-2500 scanner described, Sep:28
partnership with Championship Association of Mechanics (CAM), Sep:88
pit crew Dream Team, Mar:97
product catalog on CD-ROM, Apr:66
Scan Tools Shootout, Nov:75-77
Vac-U-Fill VT Coolant Evacuator/Refiller, 1998 Top 20 Tools, Sep:32
Vantage graphing digital multimeter, Apr:73
Vantage graphing DMM & diagnostic database, Jan:75, Feb:94, May:95, Jun:68, Jul:93, Aug:75, Sep:92, Oct:B19, Nov:93, Dec:72
Society of Automotive Engineers (SAE)
international student design competition, Apr:53
point-and-click method of ordering, Jul:86
SAE J1772 Electric Vehicle Charging Standards, Aug:57

1998 Motor Magazine Index

Understanding Automotive Electronics, fifth edition published, Oct:50
Software
AE Clevite, CD-ROM version of Clevite Electronic Engine Kit (CEEK), May:88
ALLDATA, Series 295 database for Windows, Feb:94, Mar:118, Apr:73, Sep:91
Hunter Engineering Company, WinAlign 3.0 alignment software, Nov:61
MOTOR Magazine, **Service Slants** on disk, May:95, Jun:73, Jul:93
Target Training, Nissan Engine Control System on CD-ROM, Sep:91
Tools for Education, Smoghouse Emissions Training Software, Sep:30-31
Solar, Model 5055 coolant recycler/system tester, Feb:97, Mar:112, 123
Solara (Toyota), 1999 tech report, Dec:27
Sonata (Hyundai), persistent MIL illumination (1993), Mar:108
Sonoma (GMC), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
SP Tools
universal hose pliers, Jan:75, Feb:94, Mar:123, May:95, Jun:68, Jul:88, Aug:75, Oct:B23, Nov:93, Dec:72
SP Tools/Schley, Ford rear toe adjustment wrench, Jul:58
Specialty Equipment Market Association (SEMA), Arizona bill to deny scrappage, Sep:60-61
Specialty Products, EZ Cam XR, Nov:61
Speed-Pro, High Performance Engine Rebuilding and Blueprinting School, Apr:66
Spirit (Dodge)
cruise control characteristics (1989-95), Nov:81-82
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
SPX Corp.
Enterprise Alliance, PASSPORT Technical Standards for computer interoperability, Jan:60
Tech 2 Flash diagnostic tool for GM vehicles, Feb:92
SPX Kent-Moore
J-23688 coolant tester, Sep:77
J-24460-01 pressure tester, Sep:78
J-35944-A transmissions cooler flusher, Nov:73
Special Service Tools catalog, Oct:B21
Standard Motors, oxygen sensors, May:67
Stant, Standard-Thomson SUPERSTAT thermostat, Sep:77
Stanza (Nissan), clutch chatter (1990-92), Sep:87
Starr Products, Socket Adapters, 1998 Top 20 Tools, Sep:38, 40
Steering and Suspension
OE Scheduled Maintenance, Jul:46-48
Vehicle Manufacturers' Recommended Maintenance Intervals, wall chart, Jul:49-56
Steward-Warner, Spanish language catalog, Jan:69
Stratus (Dodge)
2.4-liter, timing belt service (1996), Oct:22-23
cruise control characteristics (1993 on), Nov:81-82
gauges go to zero (1995), Jul:70-71
inconsistent wiper delay, no right turn signal cancel (1995), Dec:61
intermittent electrical gremlins (1995), Aug:65
radio/clock display goes blank (1995), Sep:82
STS. *See* Service Technicians Society (STS)
Subaru
See also specific models
1999 tech report, Dec:30
Check Engine (ECS) light on (1983-86), Jun:60
flickering warning lights, Aug:66
Subaru of America, O.E. PRO Program, Dec:68
Suburban (Chevrolet), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Suburban (GMC), 4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
Sun Microsystems, Network Vehicle, Java voice user interface, Jan:61
Sunbird (Pontiac), growling/grinding noise in "Park" on incline (1992-94), Dec:66
Sundance (Plymouth), cruise control characteristics (1989-94), Nov:81-82
Sunfire (Pontiac)
growling/grinding noise in "Park" on incline (1995), Dec:66
loud knocking on rough roads (1995-96), Jul:72
Sunnen Products, AmPro line of thermal heat cleaning systems acquired, Mar:117
SUV (Chevrolet), 2.2-liter, false ABS codes (1996), Oct:23
SUV (GMC), 2.2-liter, false ABS codes (1996), Oct:23
Swift (Suzuki), funky idle speed (1993), Jan:66-67

T

T&E, Mopar Parts, OE coolant components, Sep:77
Tacoma (Toyota), tech report (1998), Feb:28
Tahoe (Chevrolet)
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
rear suspension bottoms out (1995-96), Jul:74
Talon (Eagle)
2.0-liter, MIL on with multiple driveability symptoms (before 1994), Jul:74
2.0/2.5-liter, ticking noise from engine compartment (1996), May:83
fuel gauge reads wrong (1995-96), Oct:35
Target Training Systems
CD-ROM training system for Chrysler, Dec:71
CD-ROM training system for Ford, Dec:71
new 1985-1995 Nissan engine diagnostic manual, Aug:70
new multimedia packages for ASE test preparation, Jan:68
Nissan Engine Control Systems diagnostic manual, Aug:67
on CD-ROM, Sep:91
Taurus (Ford)
3.0-liter, smoke from tailpipe after 10-15 minutes (1994), Apr:10, 12-13
clicking noise in reverse (1994-96), Apr:60
contaminated fuel tank (1993-94), May:84
fuel pump electrical noise (1986-95), Nov:78-79
lack of heat (1992), Feb:4, 7
lots of codes, no driveability problem (1996), Jul:71
no heat, May:4, 6
Tech 2 Flash diagnostic tool available, General Motors Corp., Feb:92
Tech International, tire repair products catalog, Jan:69
Tempo (Ford), fuel pump electrical noise (1988-94), Nov:78-79
Tenneco Automotive, Monroe Muscle LSE elastomor springs, Feb:88
Tercel (Toyota), steering column knock (1994), Oct:26
Test light, characteristics of, Jan:22, 24
Testers, hand-held, evolution of, Jan:22-27
The Engine Connection, *Remanufactured Engines & Cylinder Heads* catalog, Mar:116-117, Apr:66
Thexton Manufacturing
bulb tweezers, Jan:70
Fast-Spec database, Apr:67, Nov:61
Relay/Maxi Fuse Removal Tool, Feb:90
Thunderbird (Ford)
2.3-liter, warbling noise from engine compartment (1985-88), Jan:66
4.6-liter, cold-start engine noise (1993-96), Oct:40
fuel pump electrical noise (1985-96), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
power steering leak (1996), Aug:64
Tiburon (Hyundai), new engine specs (1997), Oct:40
TIF Instruments, Inc.
compact noncontact thermometer, Mar:110
TIF280 Deluxe multimeter, Jan:75, Feb:97, Mar:118, May:90, Jun:73, Jul:88, Oct:B23
TIF6600 ultrasonic leak detector, May:86
Timken
bearings and seals, Jun:67, Aug:75, Oct:B23
web site address, Jan:68
TL (Acura), 1999 tech report, Dec:29-30
Tomco
remanufactured engine control modules, Aug:68
throttle body cleaning kit, Jun:65
Tool Marketing Resources, Swivel-Hook replacement cage, Feb:88
Tools for Education, Smoghouse Emissions Training Software, 1998 Top 20 Tools, Sep:30-31
Tools and Equipment
See also **Tools of the Trade**; Parts, Accessories and Supplies
1998 Top 20 Tools of, 1998, Sep:30-32, 36, 38, 40-42, 44-48
Accu-Turn
microprocessor wheel balancer, Feb:97, Jul:88
model 5800 Microprocessor Wheel Balancer, Mar:118, Nov:87
American Tool
Chesco Ball End Long Arm Hex keys, Jul:87
Hanson drill bits, Dec:71
Hanson taps and dies, Nov:87
ATK Engines, 1999 remanufactured engine catalog, Apr:73
Bar's Leaks, cooling system sealer and conditioner, Sep:78
Bee Line
BLC100 laser wheel alignment, Jul:57
BLC500 portable wheel alignment system, Jul:58
BG Products, Inc.
Cooling System Conditioner, Sep:78
PF4HO High Output Power Flush & Coolant Recycling System, Sep:77
Blue Coral-Slick 50, Advanced Formula Engine Treatment, May:67
Century Mfg. Company, Viper A/F recycler, Sep:78
Champion, Advantage Series Compressor, Apr:74
Chicago Pneumatic, CP-749 1/2" impact wrench, Jun:68
Classic Tool Design
A/C system charging cylinder, May:90
Ford spring lock honing kit, Mar:123
Clean Burn, Inc.
used oil fired heating system, Aug:70
used-oil furnace new burner, Jan:49
CRC Industries, Brake Caliper Synthetic Grease, Mar:95
CRT Auto Electronics, Current Probe, Sep:91
Dakota Tools, J-Wrench Line, Sep:36, 38
DeltaTRAK Scientific, infrared thermometer, Feb:94, Jun:68, Aug:75, Sep:92
Eagle Equipment, two-post lifts, Dec:71
EASE Simulation, OBD II Windows-based PC scan tool, Jun:67, Aug:70, Sep:47-48, Nov:93
Edge Diagnostic Systems, PACDock, Sep:38
Ferret Instruments, Model 950 Lab Scope KV Adapter, Sep:31-32
Fluke Corp., 98 Series II Auto Scopemeter, Feb:97, Apr:74, Sep:92
Gates Rubber Company, PowerGrip SB clamp, Sep:77
Hannay Reels, N700 spring rewind reel, Jan:49
Hansen Enterprises, RF Socket Tray, Sep:32, 36
Hennessy Industries
Ammco Model 710 on-vehicle brake lathe, Mar:96
Ammco Model 2800 Environmental Lathe Enclosure, Mar:95, Sep:44-45
Ammco Model 4000 combination lathe, Mar:96
Holley, Performance Products fuel systems cleaners, May:67
Hunter Engineering Company
B400 computerized brake tester, Mar:95
BL500 combination brake lathe, Mar:96
GSP 9700 Vibration Control Center, Sep:45-46
Injectoclean, AG420 Gas Analyzer, Feb:97
Interro Systems
I/M emissions repair station, Dec:75
PDW Personal Diagnostic Workstation, Jun:67
PST 500 personal OBD II scan tool, Mar:118, Apr:74, May:90, Jun:68
IT&T, Inc., Power Graphing Scope, Sep:42
Kent-Moore, Wheel Hub Resurfacing Kit, Sep:31
Lanair, waste-oil furnace, Jan:50, Feb:97
Leica, Duo-Chek Engine Coolant & Battery Tester, Sep:78
Lenan Corp., waste oil heaters, Dec:72
L.E.S., Camsticks, Nov:87
Lincoln Automotive, Quick Kick battery chargers, Dec:71
Lisle Corp.
50750 oil filter pliers, Jan:49
50950 truck and tractor oil filter pliers, Jan:50
brake caliper bit set, Mar:96
parking brake cable remover, Mar:96
LuK, *Clutch System Diagnostic Guide*, Feb:94, May:90, Jul:88, Sep:91, Nov:87
Mac Tools, Scanalizer Fuel System Tester, Sep:45
Mill Supply, Inc., restoration parts catalog, Sep:91
Mohawk Resources Ltd.
educational two-post lift comparison booklet, Nov:93, Dec:72
USL-6000 Universal Scissor Lift, Sep:36
Moog Automotive
chassis assortment incentives, Aug:70
chassis height locator tool, Jul:57
K8702 sway bar link, Nov:93
Mopar, Smart Valve Technology shocks and struts, Feb:94
MOTOR Magazine, back issues, Jun:73
MOTOR Publishing, waveform reference manual, Apr:74
Motorlife, Bilstein R-2000 engine flusher, May:90
Motorvac Technologies, Transtech ATF recycler, Apr:74
MPSI, DM 1000 multimeter, Nov:87
OTC, Brand of SPX, ABS reader with directional control, Mar:95
Prestone, Cooling System Treatment, Sep:77
Pro-Cut International
computerized on-car brake lathe, Mar:96
PFM900 Computerized On-Car Lathe, Sep:36
Raynger MX Series Infrared Thermometer, Sep:41-42
Raytek
noncontact thermometers, Mar:123
Raynger MX noncontact thermometers, May:90, Nov:87, Dec:72
Raynger ST3 thermometer, Jul:88
Reznor, waste-oil furnace, Feb:94, Jun:67, Sep:91
Rotary Lift, open front alignment rack, Nov:93
RTI Technologies, RHS780 A/C Refrigerant Handling System, Apr:73
Schley Products, Toyota Timing Belt Tensioner Compressor, Sep:42, 44
Snap-On Diagnostics, *Scanlines* free technical tips newsletter, Apr:74
Snap-On Tools

infrared thermometers, Dec:71
Vac-U-Fill VT Coolant Evacuator/Refiller, Sep:32
Vantage graphing digital multimeter, Apr:73
Vantage Graphing DMM & Diagnostic Database, Jan:75, Feb:94, May:95, Jun:68, Jul:93, Aug:75, Sep:92, Nov:93, Dec:72
Solar, portable antifreeze recycler, Feb:97, Mar:123
SP Tools, universal hose pliers, Jan:75, Feb:94, Mar:123, May:95, Jun:68, Jul:88, Aug:75, Nov:93, Dec:72
SP Tools/Schley, Ford rear toe adjustment wrench, Jul:58
SPX Kent-Moore
J-23688 coolant tester, Sep:77
J-24460-01 pressure tester, Sep:78
Stant, Standard-Thomson SUPERSTAT thermostat, Sep:77
Starr Products, Socket Adapters, Sep:38, 40
tap extractors, Jan:75
Target Training Systems
CD-ROM training system for Chrysler, Dec:71
CD-ROM training system for Ford, Dec:71
TIF Instruments, Inc., TIF280 Deluxe Multimeter, Jan:75, Feb:97, Mar:118, May:90, Jun:73, Jul:88
Toyota, *Star Service News*, Jan:75, Feb:97, Apr:74, May:95, Jun:68, Jul:88, Aug:75, Sep:92, Nov:93, Dec:72
Tracer Products
EZ-Ject multi-dose dye injection system, May:88
Titan UV/Blue leak detection lamps, Jun:67, Sep:77
Tracerline Dye-Lite coolant leak dyes, Sep:78
UEI
ADM4200 diagnostic multimeter, Aug:70
diagnostic equipment, Dec:72
new series of test tools, Jun:73
UView, cooling system leak detection, Sep:78
VersaChem, Spotcheck Jr. Crack and Leak Detection Kit, Sep:30
Vetronix Corp., PXA-1100 emissions analyzer, Apr:73
Wagner Brake Products
brake rotor micrometer, Mar:95
Wet Check Brake Fluid Test Strips, Jul:87, Sep:40-41
Walton Company
tap extensions, May:90, Sep:92
tap extractors, Jul:88
Wynn Oil Company
brake service kit, Mar:95
POWERFLUSH cooling system service program, Sep:78
Yokogawa
GA500 refrigerant gas analyzer, Jan:75, Apr:73, Jul:88, Aug:75, Sep:91, Nov:93, Dec:71
H-10PM refrigerant leak detector, Feb:94, Mar:118, May:95, Jun:68

Tools of the Trade
See also Parts, Equipment and Supplies; Tools and Equipment
air conditioning, leak detection kit, Aug:68
alignment, portable alignment stands, Jan:71
alternators, IAR replacement alternators, May:86
brakes
BRC480 dual mode on car brake lathe, Nov:85
DOT3 and DOT4 brake fluid, Nov:85
parking brake cable remover, Jun:65
Vacuum Bleeder, Sep:90
caps and rotors, Profession Gold line, Jul:82
clamps, high-performance hose clamps, Aug:68
cleaners and washers
Advantage Plus hand cleaner, Dec:70
Bilstein R-2000 Engine Flush System, May:86
CareFree Parts Washer, Jan:70
Citrus Lotion, Oct:55
Industrial Strength Cream, Oct:55
LP line of parts washers, Jan:71
multifunction flusher, Sep:90
Tru-Volt electronic contact cleaner/protectant, Oct:55
compressors
Advantage Series air compressors, Jun:65
AMD-6550 compressor drain, Dec:70
computers, remanufactured engine control modules, Aug:68
diagnostics
compact noncontact thermometer, Mar:110
D-488 digital multimeter, Jun:65
hand-held spec database, Apr:67
Import Transmission Troubleshooter Cartridge, Mar:110
Micro400 Digital Battery Analyzer, Jan:70
Model 5055 coolant recycler/system tester, Mar:112
Perception combination scope/graphing multimeter, Mar:111-112
Pressurator cooling system tester, Jan:72
TIF6600 ultrasonic leak detector, May:86
differentials, overhaul kit, Nov:85
dyes, Multifunction leak-detection dye, Aug:68
engine stands, Eagle Series heavy-duty engine stand, Dec:70
filters
Fram Tough Guard oil filters, AlliedSignal, Inc. Automotive Aftermarket, Feb:88
high-efficiency oil filters, May:86
gaskets
Engine$aver Abrasive Gasket Removal kit, Mar:111
Expand-Tech exhaust gaskets, Jan:70
PermaDry Plus valve cover gasket, Aug:68-69
hand tools
3/8-inch drive impact sockets, Jul:82
adjustable buffer handle, Feb:88
bulb tweezers, Jan:70
CP830 high-torque air ratchet, Jan:72
Drill Doctor drill bit sharpener, Jan:71
ERGOPALM2 3/8-inch ratchet, Sep:90
Exact-Dose A/C dye injector, Apr:67
extra long 5/16-inch terminal battery wrench, Nov:85
FAR720 3/8-inch drive air ratchet, Apr:67
gasket scraper, Jan:70-71
heavy-duty snap ring pliers, Oct:55
impact sockets, Mar:112
IR108 heavy-duty air ratchet, Feb:90
Magna Guard air chisel shield, Oct:55
quick disconnect tool assortment, Jun:65
ratcheting box wrenches, Jul:82
Relay/Maxi Fuse Removal Tool, Feb:90
retaining ring pliers, Jul:82
Rodhandler welding rod feeder, Dec:70
socket organizers, Jun:65
throttle body cleaning kit, Jun:65
torque stick extension kit, Aug:69
universal Harmonic Balancer Installation Kit, Jan:71
universal Hose Pliers, Schley Products, Mar:110-111
jacks and lifts
AG-9A asymmetric two-post lift, Jul:82
ML-6 portable lift, Feb:91
SM180 four-post above ground lift, Feb:88
Universal Scissors Lift, Mar:110
lights
Bounce Lite, Feb:90
Swivel-Hook replacement cage, Feb:88
lubricants and sealants
Antiseize compound, Dec:70
Break Away rust penentrent/protectant, Feb:90
Dr. Tranny Kooler Clean, Dec:70
Dr.Tranny Instant Shudder Fixx, Nov:85
plastic welding system, Aug:68
Power Luber cordless grease gun, Apr:67
QuikSteel epoxy, Jan:71
SiliKroil rust penetrant and lubricant, Jan:71
power steering
hose repair kit, Sep:90
remanufactured steering pumps, Jul:82
reels, LN700 spring-rewind hose reels, Feb:90
reference, Torque Tables booklet, Feb:90
seals, axle seal assortment, Nov:85
shelving, Clipper Industrial Shelving Systems, Oct:55
software
Ad-vantage Wave! graphing multimeter software, Feb:90
GTI graphing software, Sep:90
Windows-based OBDII software, Mar:111
suspension, Monroe Muscle LSE elastomor springs, Feb:88
thermostats, Green Stripe SUPERSTAT thermostats, May:86
tool carts, TRX1412 12-Drawer Tool Cart, Jan:70
training
Asian Engine Management Systems self-study course, Aug:69
Ford EEC-IV & EEC-V Advanced Driveability training program, Apr:67
transmissions, TRANSTECH transmission fluid flusher, Mar:110
U-joints, Alloy Super Joints, Oct:55
wiper blades, Windspoiler wiper blades, Jan:71-72
work stations
Automotive Tool Caddy, Sep:90
modular work benches, Feb:91
Top Twenty Tools
Dakota Tools, J-Wrench Line, Sep:36, 38
EASE Simulation, OBD II Windows-Based Scan Tool, Sep:47-48
Edge Diagnostic Systems, PACDock, Sep:38
Ferret Instruments, Model 950 Lab Scope KV Adapter, Sep:31-32
Hansen Enterprises, RF Socket Tray, Sep:32, 36
Hennessy Industries, Ammco Model 2800 Environmental Lathe Enclosure, Sep:44-45
Hunter Engineering Company, GSP 9700 Vibration Control Center, Sep:45-46
IT&T, Inc., Power Graphing Scope, Sep:42
Kent-Moore, Wheel Hub Resurfacing Kit, Sep:31
Mac Tools, Scanalizer Fuel System Tester, Sep:45
Mohawk Resources Ltd., USL-6000 Universal Scissor Lift, Sep:36
MPSI, SpectraGas Portable 5-Gas Analyzer, Sep:46-47
Pro-Cut International, PFM900 Computerized On-Car Lathe, Sep:36
Raytek, Raynger MX Series Infrared Thermometer, Sep:41-42
Schley Products, Toyota Timing Belt Tensioner Compressor, Sep:42, 44
Snap-On Tools, Vac-U-Fill VT Coolant Evacuator/Refiller, Sep:32
Starr Products, Socket Adapters, Sep:38, 40
Tools for Education, Smoghouse Emissions Training Software, Sep:30-31
VersaChem, Spotcheck Jr. Crack and Leak Detection Kit, Sep:30
Wagner Brake Products, Wet Check Brake Fluid Test Strips, Sep:40-41
Topaz (Mercury), fuel pump electrical noise (1988-94), Nov:78-79
Toronado (Oldsmobile)
growling/grinding noise in "Park" on incline (1992), Dec:66
new design front-wheel-drive hub (1992), Sep:80
Town & Country (Chrysler)
2.4-liter, timing belt service (1996), Oct:22-23
cruise control characteristics (1989 on), Nov:81-82
intermittent sliding door power locks (1996), Jan:64
radar-jamming driveabilty (1996), Feb:84
startup stall, transmission faults to 2nd gear (1995), Mar:104-105
Town Car (Lincoln)
4.6-liter, cold-start engine noise (1993-96), Oct:40
5.0 liter, crankcase condensation (1985), Jan:6-7
broken trunk pull-down (1988-96), Oct:23
engine died during smog check (1987), Dec:18-19
fuel pump electrical noise (1986-94), Nov:78-79
lots of codes, no driveability problem (1996), Jul:71
Toyota
See also specific models
harsh shifts, Sep:86
long-term fuel trim, Jan:17, 19
Low Emission Vehicle (LEV), May:70
measuring Vf voltage, Jan:19
no start and/or no trouble codes, Jan:14
Star Service News, Jan:75, Feb:97, Mar:118, Apr:74, May:95, Jun:68, Jul:88, Aug:75, Sep:92, Nov:93, Dec:72
testing Check Engine light operation, Jan:14
testing Vcc voltage, Jan:14
Tracer (Mercury)
brake noise under 35 mph (1991-96), Feb:86
fuel pump electrical noise (1991-96), Nov:78-79
Tracer Products
EZ-Ject multi-dose dye injection system, May:88
multifunction leak-detection dyes, Aug:68
TITAN UV/Blue leak detection lamps, Jun:67, Sep:77, Nov:73
Tracerline Dye-Lite coolant leak dyes, Sep:78
Tracerline florescent leak detection system, Oct:B23
Tracerline Mobile Leak Detection Products catalog, Oct:50
web site address, Jun:66
Tracker (Geo)
no 4WD low gear (1995), Nov:83
torque converter clutch chuggle (1989-95), Jul:74

Trade Secrets
626 (Mazda), clutch hosing oil leak (1994), Sep:16-17
6000 (Pontiac), fuel leak (1989), Jan:10, 12-13
Accord (Honda), oil leak and won't shift out of first gear, Dec:14, 18-19
Aurora (Oldsmobile), engine overheated (1995), Oct:14-15
being honest and straightforward, Jun:10, 12-13
being respectful, Feb:10, 12-13
Bonneville (Pontiac), ABS and Traction Control warning lights stay on (1993), Aug:10, 11-12
buying the latest equipment, Aug:10, 12-13
Century (Buick)
2.5-liter, intermittent die-out (1989), Sep:14, 16-17
hard start when cold, loss of power and bucking (1993), Feb:10, 12-13, Apr:95
Chrysler, 3.3-liter, noise on right side, Mar:10-12
customers in the work area, Oct:12, 14-15
encourage creative thinking and innovative diagnosis, Sep:14, 16-17
getting things in writing before starting any repair job, May:12
Grand Cherokee (Jeep), A/C won't cool (1995), Dec:14, 18-19
LeSabre (Buick), gasoline odor (1987), Jun:10, 12-13
looking for warnings of complications, Apr:10, 12-13
Ninety Eight (Oldsmobile), 3.8-liter, intermittent stalling (1986), Mar:10-12
not becoming defensive, Dec:14, 18-19
not letting existing problems create new problems, Mar:10-12

1998 Motor Magazine Index

not taking repair risks, Oct:12, 14-15
protecting your image, Jul:8, 10-11
ramifications of shoddy repairs, Jan:10, 12-13
Reliant (Plymouth), charging system problems (1986), Jul:10-11
Sable (Mercury), A/C doesn't cool (1994), Aug:10, 11-12
Safari (GMC), 4.3-Liter, poor power (1995), Nov:12, 14-15
Taurus (Ford)
3.0-liter,smoke from tailpipe after 10-15 minutes (1994), Apr:10, 12-13
lack of heat (1992), Feb:4, 7
Town Car (Lincoln), engine died during smog test (1987), Dec:18-19
using common sense, Nov:12, 14-15
Training
American Management Institute (AMI), web site address, Jan:68
Automotive Management Institute (AMI), *Increasing Profit by Increasing Proficiency* course, Oct:50
Automotive Service Industry Association (ASIA)
Sales Management Training-Field Coaching Program, Feb:92
Salesability seminar, Feb:92
ChekChart, new multimedia packages for ASE test preparation, Jan:68
Dana Corp., Technical Resource Park (TRP), Jan:58-59
Fluke, new training package for Hall's Multimedia Series in Automotive Technology, May:88
Ford EEC-IV & EEC-V Advanced Driveability training program, Apr:67
OBD II system seminars, Jendham, Feb:92
Target Training Systems
CD-ROM training system for Chrysler, Dec:71
CD-ROM training system for Ford, Dec:71
new 1985-1995 Nissan engine diagnostic manual, Aug:70
new multimedia packages for ASE test preparation, Jan:68
Nissan Engine Control System on CD-ROM, Sep:91
Trans Sport (Pontiac)
detonation, oil burning (1993-95), Dec:60-61
growling/grinding noise in "Park" on incline (1992-95), Dec:66
new design front-wheel-drive hub (1992-95), Sep:80
Transmissions, *The Great (ATF) Escape*, Apr:22-24, 26
Tredia (Mitsubishi), transaxle service (1989-90), Mar:109
Trico Products, Windspoiler wiper blades, Jan:71-72
Trofeo (Oldsmobile), new design front-wheel-drive hub (1992), Sep:80
Trooper (Isuzu)
3.2-liter, replacing valve covers, Dec:60
intermittent hesitation (1996), Dec:24-25
Trouble Shooter
cheap air filters on hot-wire MAF sensor setup, Oct:6, 8
Corsica (Chevrolet), 3.1-liter, long crank times and rough idle (1994), Dec:10, 12
Crown Victoria (Ford), 5.0-liter, excess blowby (1984), Jun:6-7
Ford
5.0 liter, clogged oil pickup tube screen (mid-to-late 80s), Jan:7
sludge-tolerant throttle bodies, when bore cleaning is unavoidable, Sep:4, 7, 10
Magnuson-Moss Warranty Act, warranty work by independent shops, Mar:9
New Yorker (Chrysler), 3.3-liter, rocker arm shaft pedestal broken (1991), Nov:6, 11
OBD II, reprogramming flash PROMs, Aug:4, 6
Ram 50 pickup (Dodge), engine runs too rich (1989), Jul:4-5
Taurus (Ford), no heat, May:4, 6
Town Car (Lincoln), 5.0 liter, crankcase condensation (1985), Jan:6-7
Windstar (Ford), hesitation under load, erratic shifting (1995), Oct:6, 8
Y2K and automotive ECUs, Apr:4, 6
Truck (Nissan)
3.0-liter, engine replacement (1995-96), Jul:73
coolant leak (1990-95), Dec:64, 66
Truecraft Tools
new catalog, Nov:86
spring loaded pliers, Oct:B24
web site address, Mar:116
Trumark, new replacement compressor for Ford and Chrysler, Jan:69

U

U-Haul International
becoming a dealer, Jul:87, Aug:75, Oct:B24, Dec:72
UBP, ultimate brake rotor, Jun:67, Aug:70
UEI
new series of diagnostic test tools, Aug:70
new series of diagnostic test tools, Jun:73, Oct:B24, Dec:72
Ultra Low Emission Vehicle (ULEV)
Honda, May:70, 76
M-Class (Mercedes), Mar:101
Underground Storage Tank (UST), new regulations for, Jan:34
Universal Technical Institute, Inc. (UTI)
Al Unser Scholarship Competition, Jun:54-55
training partnership with BMW of North America, Jul:64
Universal Underwriters Group, safety and environmental contact information, Jan:34
Used Oil Management Association, web site address, Jul:86
UTI. *See* Universal Technical Institute, Inc. (UTI)
UView, cooling system leak detection, Sep:78

V

V70 (Volvo), bi fuel vehicle, May:77-78
Valvoline
semi-synthetic DuraBlend oil, Jan:50
SynPower synthetic oil, Jan:49
Valvoline/ASE Poll of the American Mechanic, results, Sep:62
Van (Nissan), rough idle, no power, Oct:24
Vanagon (Volkswagen), defective ignition coil (1989), Jan:66
VDO North America, *VDO Performance Instruments* catalog, Jan:69
VersaChem
plastic welding system, Aug:68
Spotcheck Jr. Crack and Leak Detection Kit, 1998 Top 20 Tools, Sep:30
Vetronix Corp.
Enterprise Alliance, PASSPORT Technical Standards for computer interoperability, Jan:60
PXA-1100 emissions analyzer, Apr:73
Scan Tools Shootout, Nov:75-77
Tech 1 series scanners described, Sep:28
Victor Reinz
1998 master gasket catalog, Dec:68
one piece gasket for General Motors 5.7-liter V8, Aug:67
Villager (Mercury)
3.0-liter, engine replacement (1995-96), Jul:73
fuel pump electrical noise (1993-96), Nov:78-79
Vision (Plymouth)
burnt ATF (1993-97), Oct:26-35
cruise control characteristics (1993 on), Nov:81-82
metallic noise in front end (1996-97), Oct:40
Volkswagen
See also specific models
2.8-liter, wrong DTC, Feb:80
new coolant, Oct:35
oil pressure diagnosis, Dec:45-46
oil quantity change, Nov:80
poor driveability (1980 on), Mar:104
poor grounds, May:73
Volvo
See also specific models
bi-fuel vehicles, May:77-78
no start, low fuel pressure (mid 80s-early 90s), Dec:46
no start, weak or no injector pulse (mid 80s-90s), Dec:46
Voyager (Plymouth)
2.4-liter, timing belt service (1996), Oct:22-23
cruise control characteristics (1989 on), Nov:81-82
intermittent sliding door power locks (1996), Jan:64
radar-jamming driveabilty (1996), Feb:84
startup stall, transmission faults to 2nd gear (1995), Mar:104-105

W

W4 truck (Chevrolet), 4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
W4 truck (GMC), 4.3/5.0/5.7-liter, engine noise (1996-97), Sep:84
Wagner Brake Products
correction to 800 number in *Source Guide*, Dec:55, 82
DOT 5.1 brake fluids, Aug:70, Nov:87
two new brake catalogs, Sep:88
web site address, Sep:88
Wet Check Brake Fluid Test Strips, Jul:87, Oct: B24
1998 Top 20 Tools, Sep:40-41
Wagner Lighting, BriteLite line expanded, Mar:117
Walton Company
tap extensions, May:90, Sep:92
tap extractors, Jan:75, Jul:88
Waterloo Industries
tool box and storage systems catalog, May:88
TRX1412 12-Drawer Tool Cart, Jan:70
web site address, Aug:67
Wells Mfg., Profession Gold line of caps and rotors, Jul:82
White Industries, XL series refrigerant equipment, Oct: B24
Windstar (Ford)
3.8-liter, PCM compatibility (1995), Jan:64-65
front end noises (1995-97), Mar:107-108
hesitation under load, erratic shifting (1995), Oct:6, 8
lots of codes, no driveability problem (1996), Jul:71
Wix Filtration Products, *Master Catalog*, Oct:50
World Wide Web
see also Computers; Internet
web site address
ACDelco, Dec:71
Airtex Products, Nov:86
ALLDATA, Jan:68
AlliedSignal, Inc., Feb:92
American Management Institute (AMI), Jan:68
Autodiagnos, Jan:68
Automotive Electronics Services (AES), Jan:69
Automotive Management Institute (AMI), Oct:50
Automotive Service Association (ASA), Nov:86
BWD Automotive, Jun:66
California Integrated Waste Management Board, Nov:86
CCAR-*Green*Link, Jan:34, 68, Dec:68
Champion Laboratories, Aug:67
Contact East, Dec:68
CRT Auto Electronics, Sep:91
Environmental Protection Agency (EPA), Jan:34
Federal-Mogul, Jan:68
Fel-Pro, Jan:69
Flex-a-lite, Sep:88
GNB Technologies, Jan:69
GO/DAN Industries (GDI), Jun:66
Kaeser Compressor, Sep:88
Micro Processor System, Inc. (MPSI), Aug:67
Mohawk Lifts, Jan:69
MOTOR Magazine, Jul:2
Motorist Assurance Program (MAP), Jul:86
MotorVac Technologies, Jun:66
National Automotive Radiator Service Association (NARSA), Jul:86
National Institute for Occupational Safety and Health (NIOSH), Jan:34
New England Business Service (NEBS), Apr:66
NGK Spark Plugs, Aug:67
Nylok Fastener, Dec:68
Occupational Safety and Health Administration (OSHA), Jan:34
Optima Batteries, Jan:69
Safety Kleen, Jan:34
Service Technicians Society (STS), Aug:67
Timken, Jan:68
ToolSource, Sep:88
Tracer Products, Jun:66
Truecraft Tool, Mar:116
Universal Underwriters Group, Jan:34
Used Oil Management Association, Jul:86
Wagner Brake Products, Sep:88
Waterloo Industries, Aug:67
Worldwide Diagnostic System (WDS), Ford Motor Company, Apr:54-55
Wrangler (Jeep), software flash updates (1997), Dec:64
WWW *See* World Wide Web (WWW)
Wynn Oil Company
brake service kit, Mar:95
POWERFLUSH cooling system service program, Sep:78
TranServe II+ Automatic Transmission Flush & Fill machine, Nov:73

X

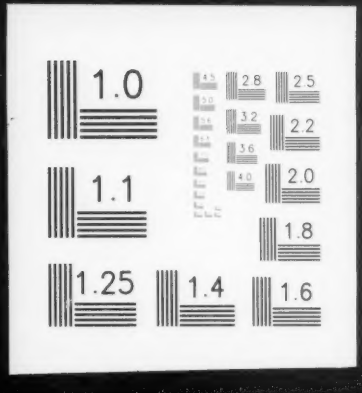
X-90 (Suzuki), noisy front wheel spindles (before 1996), Sep:87
XJ6 (Jaguar)
4.0-liter
engine vibration, Feb:80
MIL on with code(s) set (1995), Jan:64
engine knock (1995), Mar:104
power seat fuses blow (1995), Jan:66
sticky throttle (1995-96), Jul:76-77
XJ8 (Jaguar), battery disconnect procedures (1998 on), Dec:63
XJ12 (Jaguar)
engine knock (1995), Mar:104
power seat fuses blow (1995), Jan:66
XJR (Jaguar)
4.0-liter, engine vibration, Feb:80
engine knock (1995), Mar:104
power seat fuses blow (1995), Jan:66
XJS (Jaguar), 4.0-liter, MIL on with code(s) set (1995), Jan:64
XK8 (Jaguar)
battery disconnect procedures (1997 on), Dec:63
safety recall (1997), Nov:84
XR4Ti (Mercury), 2.3-liter, warbling noise from engine compartment ('85-'89), Jan:66

Y

Y2K, and automotive ECUs, Apr:4, 6
Yokogawa
GA500 Gas Analyzer, Jan:75, Apr:73, Jul:88, Aug:75, Sep:91, Oct:B24, Nov:93, Dec:72
H-10PM refrigerant leak detector, Feb:94, Mar:118, May:95, Jun:68
Yukon (GMC)
4.3/5.0/5.7-liter, improper EGR valve installation (1993-96), Feb:84
rear suspension bottoms out (1995-96), Jul:74

Z

Zero Level Emission Vehicle (ZLEV), Honda, May:70, 76


1.0
1.1
1.25
1.4
1.6
2.8
2.5
3.2
2.2
3.6
2.0
4.0
1.8